

MINING LAW

H. W. MACFARREN

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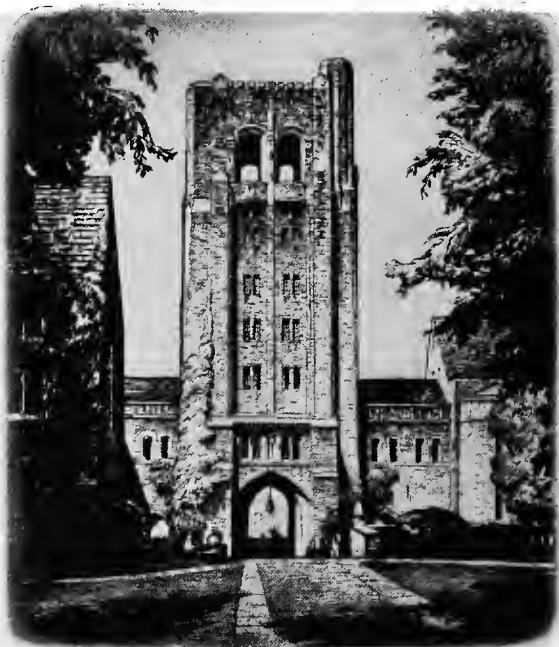
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MINING LAW
FOR THE
PROSPECTOR, MINER, AND
ENGINEER

By
H. W. MACFARREN

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PREFACE

In adding another work on mining law to those already before the public, it is necessary to give a reason. The present standard works on the subject are the production of mining attorneys, and while the value of their works is unquestioned, they are, perforce, more valuable and suitable for practising attorneys and in connection with mining litigations than for miners and as a guide in the field. This work has been prepared for the miner by a miner—using the word miner as a generic term to include all who may be interested in the subject of mineral rights and titles in contradistinction to mining attorneys—though it is believed that the work will not be without elementary interest and value to the law profession.

The purpose in view is to give a simple and easily grasped, though comprehensive idea of the mining law, showing its fabric and structure, that the reader and student may obtain the basic principles and facts upon which to take up either the more advanced study of mining law or use it intelligently and satisfactorily as a prospector, surveyor, claim owner, or property manager. It represents the experience and observation of the writer in the mining profession and as a mineral examiner of the Field Service of the General Land Office, in which capacity he has been in daily contact, in both office and field, with miners, mineral claimants, and the subject of mining rights and titles.

H. W. MACFARREN.

Salt Lake City, Utah, September 1, 1910.

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MINING LAW
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PROSPECTOR, MINER, AND ENGINEER

CHAPTER I

Origin of American Mining Law

The discovery of gold in California was made in 1848, and was immediately followed by the immigration to that part of the world of thousands and hundreds of thousands of men of every class, occupation, and extraction. These, arriving in the New Eldorado, found it to be a wild, unpopulated region, far removed from organized civilization; one in which, to a large extent, every man made his own law. Led by that instinct of proceeding collectively along orderly and definite lines, which is observed even in the lowest of animals and finds its highest development in the educated, thinking, untrammelled American, they at once proceeded to establish customs and rules for their guidance. It was in these customs and rules that American mining law had its birth, and from which it has been developed.

Upon what were these early and incipient laws modeled? Some presume to see in them the already existing mining laws and customs of Mexico and other countries; but a careful consideration indicates that they were mainly evolved by the newly made miners to meet the conditions in which they found themselves. The simple wisdom of these early customs and laws, and the extent to which they have become our present American mining law, is the grandest monument that can ever be raised to the nobility and sterling qualities of these pioneers.

The first step in the making of the law was the formulating of rules to be observed in the immediate vicinity of each camp. These were adopted in mass-meetings by the miners of the camp, who termed the area over which they should extend a district. As the States and Territories in which mining was carried on became organized, they, recognizing the marked similarity of the customs and rules of the various mining districts—which has been called the American common law of mining—

framed their mining laws upon the same, with the expressed or implied idea that where these customs and rules were not in conflict with the State and National laws, they would be accepted as evidence in controversies and would govern decisions. The National laws and regulations were subsequently framed along these lines.

In considering the mining law of today, it should be remembered that it is based on the customs and rules of the miners, and that in the absence of adverse statutes, regulations, or decisions, the ideas of practical miners will be taken and allowed to prevail, so far as can be consistently done. The present mining law is contained in the Federal Statutes or Acts of Congress, in the regulations and decisions of the General Land Office, in the State statutes, and in the decisions of the Federal and State courts, also to some extent in the remaining rules and customs of any still existent local mining districts.

The early prospectors and miners were really trespassers upon the public domain, appropriating it and its mineral contents without the sanction of any Federal law. Though they acted in most cases under district regulations and State laws, these were unable to confer to the miners any actual title to the ground which they were working, as the ownership was vested in the United States. The Acts of Congress of 1866 and 1870 were the first real attempts at providing laws for the protection of miners and the disposal of mineral land to them. The Act of May 10, 1872, superseding or extending the previous ones of 1866 and 1870, is the basis of our present law, and we are not concerned with the small differences of previous legislation, except in the case of claims located prior to the Act of 1872. This Act is part of the Revised Statutes (abbreviated R. S.). Amendments and subsequent Acts are termed Acts of Congress. These Federal Statutes, being the National laws on mining, are the highest and governing authority, and are in force throughout the public-land States except where provision to the contrary has been made by Congress.

The General Land Office or Land Department, as the office in charge of the disposal of the public lands, has the authority to make and enforce regulations for such disposal, subsidiary

to and consistent with the Federal Statutes. The United States mining laws as contained in the Federal Statutes and the mining regulations of the General Land Office are issued by that office under the title, 'United States Mining Laws and Regulations Thereunder'; they are found in this volume as Appendix B. Almost equally important with the regulations are the Decisions of the Land Department, known as the L. Ds. These contain the decisions and circulars of the General Land Office and Department of the Interior regarding public-land questions. The subject of mining law, mainly with regard to patents, occupies a large part of the 38 volumes now issued.

The State statutes being subordinate to the Federal Statutes and unable to increase or to take away, except by restriction, from the general rights conferred by the Federal Statutes, are mainly concerned with specifying how the details shall be performed to obtain the mining rights granted by the Federal Statutes. A digest of the more important points of these forms Appendix A of this work. A study of them indicates that the principal matters they take up are to specify the time within which to mark the boundaries and record the claim, the time within which to do the discovery work and its nature, how the claim shall be marked, details of the location certificate, etc.; that they are in the nature of regulations, rather than primary legislation; that they can be dispensed with—in fact, California for many years prior to 1909 had no State mining statutes, while Alaska has none today—with about the only difference of allowing wider latitude under the Federal Statutes in those details they restrict; and that by making the Federal Statutes more detailed, all necessity of State mining statutes would be done away with.

The customs and rules of the local mining districts, where any such customs and rules may remain or are being enforced today, are of similar purpose but less weight than the State statutes, with which as well as with the Federal Statutes they must harmonize. They should be complied with as consistently as possible, since the Federal Statutes recognize and give some weight to these local customs and rules. In the early days when mining was carried on in isolated and but little organized

communities far from the seat of government, the district regulations were a most important thing to secure order and justice to all, but as these communities were brought under organized and capable Territorial and State control and the mining laws were developed, the necessity of these regulations became less and less until now there appears to be no call for them except in such isolated communities as the remote mining districts of Alaska.

The decisions of the courts, the 'judge-made' law, interpreting and applying the mining statutes and customs, are found in the various court reports. These constitute, perhaps, the most important part of mining law, for, on account of the meagerness of the Federal Statutes—hardly more than suggestive in some cases—the courts have found it necessary to make the law by their decisions as the different questions came into litigation. A few of the court decisions are at variance with each other or the general ideas that prevail in mining, but taken as a whole, they savor of an attempt to do justice to the miner along his own simple lines of reasoning, and not according to the technicalities and intricacies of law.

Connected with the subject of what is the mining law and where it may be found, are the standard text-books on mining law. These are as follows: Lindley on Mines (2 vol., 1903); Snyder's Mines and Mining (2 vol., 1902); Morrison's Mining Rights (14th Ed., 1910); Shamel's Mining, Mineral, and Geological Law (1907); Martin's Mining Law and Land Office Procedure (1908); Costigan's American Mining Law (1908); Ricketts' Manual of American Mining Law (1911).

The present law provides, (1) for the location of lode claims upon all mineral deposits of a vein or lode character; (2) for the location of placer claims upon mineral deposits which are essentially different from lode deposits, and of oil and gas lands; (3) for the location of veins or lodes within placer claims; (4) for the location of millsites to provide surface upon non-mineral ground for reduction of ores, etc.; (5) for the location of tunnel sites to cut and claim blind lodes. To these may be added the allied laws referring to coal lands and timber and

stone lands, and the extralateral-right law allowing the vein to be followed indefinitely on its dip.

The substance of these laws is that by making a location upon the public domain in conformity to the law, the miner acquires a right of possession to the ground he appropriates, which is called a 'possessory right.' He cannot be divested of his possessory right to the ground, except it be shown that he has not complied with the law, or that the ground is more valuable for some other purpose. On a lode or placer claim, by doing annually \$100 worth of work tending to develop the claim, he preserves his possessory right from year to year. He can at any time, by having survey made, patent application filed, and \$500 worth of improvements made, pay the purchase price of \$2.50 per acre for placer claims and \$5 for lode claims, and obtain an absolute or fee title—a title not dependent on conditions—from the Government, that is irrevocable except in the case of fraud or serious error in the law.

The Act of May 10, 1872, comprehending nearly all of our present mining law, was coined from the customs and rules of the miners. For nearly twenty-five years these customs and rules had been developed and tested under strenuous conditions, before they were incorporated into the Federal Statutes. In this is seen the reason why the Act has so well stood through changing conditions to the present day. The framers were content with giving only the bare outline, the fundamentals of the law, leaving the details to the States and districts, and to the courts. Most of the questions have been solved as they arose by the courts, and mainly in this way has the mining law been built up. The tendency has been to require the Land Department to meet the new conditions arising that were not properly subject to court jurisdiction, instead of making new laws or statutes. The additions since the Act of 1872 have been few, and only those that were literally forced. It is recognized by all that much of the present law needs to be revised and added to, to meet the new conditions, but there are no well formed ideas as to how this is to be accomplished, and this is just the reason that the Act of 1872 has stood so long with but little addition.

The student of mining law should bear in mind the statement of Mr. Justice Field, one of the ablest interpreters of mining law, that "the mining laws are to be read in the light of matters of public history, relating to the mineral lands of the United States," a history of sixty years, comprehending a change from a remote unpopulated wilderness to a comparatively well settled country, where the prospector in many cases has been driven by the advancing farmer and cattleman to the highest and steepest mountain-sides or the sheltering depths of the Forest Reserves; a change from the simple idea of the true-fissure quartz vein to orebodies of every conceivable form and degree of intricacy; the exploitation of almost every known mineral, where formerly only a few were contemplated; and, incidentally, the greatest mineral development in the history of the world, much of which must be credited to the fostering spirit of the mining laws. The student who carefully considers the subject is filled with a deep respect for the framers of the Act of 1872. He realizes that suitable laws could not have been adopted immediately as new conditions and requirements arose, without making the statute books a chaos of premature and relegated laws. Furthermore, that whereas the laws of human affairs have been studied thousands of years from unchanging fundamental facts, the laws of mining as applicable to the United States, are of comparatively recent origin and have been subject to newly arising basic facts, with which the Land Department and courts have had to struggle while the statute-makers have without doubt remained too apathetic.

To the miner, in many cases, the mining law is full of unknown terror, for the reason that he does not understand its origin, purpose, and methods; consequently he is obsessed by his fear of the unknown. It is recommended that he endeavor to understand, not so much the letter of the law, as its principles, its scope, and its limitations. This can best be accomplished by acquiring a clear idea of its source and method of application, and the functions of its adjudicators. He should obtain a good conception of the Federal Statutes and the relation of all other law to it, and of the workings and jurisdiction of the Land Department. After obtaining an idea of the Federal

Statutes and General Land Office regulations, he should be able to differentiate them from the State statutes and any local district requirements. He must discriminate between the Land Department and the courts. Finally, he should familiarize himself with the specific requirements of the statutes of the State in which he is operating, for unfortunately the State statutes are not uniform. Where the locality is subject to district rules, these also must be obeyed, though district rules have generally been abandoned.

CHAPTER II

Public Land and Its Survey

All the land, together with the mineral underneath, within the United States and including Alaska, is owned by the United States as a sovereign power, except that land to which patent or title has been acquired from the United States or its predecessors, or that which, though unclaimed by private parties, never passed to the Government, but remained in the possession of the individual States. This Government land, the 'public domain,' and including mines, is under the jurisdiction, survey, and disposal of the Land Department, or as it is better known, the General Land Office, which is a branch of the Department of Interior and presided over by the Commissioner of the General Land Office.

The public domain is segregated into land districts, in which are located the local land offices under charge of two resident officers, the register and the receiver. These offices are established that the public may be able to learn just what public land is open to occupation and entry, what kind of entries may be made thereon, and to receive filings and entries. These officers also receive protests against entries, which may result in hearings before the register and receiver, who will render decisions thereon; these decisions being subject to the contestants' right of appeal to the Commissioner of the General Land Office, and from his decision to that of the Secretary of the Interior.

Closely associated with the local land offices are the offices of the surveyors-general, who have charge of surveying the public domain into townships and sections preliminary to its entry by homesteaders and other claimants of public land for agricultural purposes, and the direction of the deputy mineral surveyors in the making of patent surveys of mining claims neces-

sary before applying to the local land office for patent or title to the land embraced by the claims; also the approval and official filing of such surveys. The surveyors-general are under the jurisdiction of and report directly to the General Land Office at Washington. Likewise closely associated with the local land offices, are the offices of the Field Service or Field Division of the General Land Office, under the direction of local Chiefs of Field Service. The employees of the Field Service are generally termed Special Agents, and make field investigation of all entries of public land and matters concerning the public lands, reporting confidentially to the Commissioner of the General Land Office. Mineral entries and entries involving the mineral character of the land are investigated by Agents usually called Mineral Inspectors or 'Practical Miners,' who are versed in land and mineral law, and with practical and technical experience in mining.

The Land Department, being vested with the care and disposal of the public lands, including mines, has the authority to formulate and enforce regulations for such care and disposal. It also has the authority to render decisions on questions regarding public land over which it may exercise control; but the Land Department is bound to act according to and within the Federal Statutes in all its regulations and decisions. The Land Department does not concern itself with any land until it is filed or entered for patent, except in flagrant cases of the land being wrongly occupied to the exclusion of *bona fide* appropriators or against good public policy. It retains control over public land subject to its care up to the time it issues patent and passes the title or ownership from the Government, after which it has lost its jurisdiction to the land, and all questions thereafter raised should be taken into the courts. It is almost impossible to take questions affecting the character of public lands, which may be under the consideration of the Land Department, into the courts before patent is issued or refused. The courts look with favor upon the Land Department as a brother tribunal, and, though not bound by its constructions of the Statutes, are loath to interfere. After patent is issued or refused, the action of the Land Department may be attacked in

the courts on grounds that it exceeded its jurisdiction, acted fraudulently, or misinterpreted the law, but not for the continued litigation of the facts that have been or should have been presented to the Land Department. Since the subject of mining law is largely concerned with obtaining title to mineral land, and this title is obtained through and under the supervision of the Land Department, the miner should clearly understand the functions and workings of that department.

The States which are spoken of as the mining-law States, for the reason that the mining law is in daily use in them and that they are generally assumed to be the whole field of American mining law, are California, Oregon, Washington, Idaho, Montana, North Dakota, South Dakota, Wyoming, Colorado, Utah, Nevada, Arizona, New Mexico, and the District of Alaska. It will be noticed that they include, besides the Rocky Mountain and Pacific Coast States, the Dakotas and Alaska. Of the remaining States, many never had any public domain; to others the mining laws were not extended or were subsequently repealed. The law has some force and utility in Arkansas, Florida, Louisiana, Mississippi, and parts of Oklahoma, but owing to the almost total absence of public mineral land in those States, they will not be considered. Texas having joined the United States as a sovereign power, retained possession of her unoccupied unclaimed land, enacting a State code of mining laws to govern them. For the Philippine Islands special mining laws have been provided. The possessions of the United States outside of Alaska and the Philippines have no mining laws.

Besides knowing whence and how title is derived to mineral and other public land, it is highly important to know how this land is mapped and designated, and how it is marked in the field. In making a mineral location upon public domain, it is usually not necessary to know upon what section of land it is, or to tie the location to a land survey monument, possibly excepting placers; but with agricultural and other entries and patents rapidly encroaching on mineral lands, it is often necessary in trying to keep clear of them, or in the case of disputes, to be able to find tracts of land in the field by their markings. In case of a contest between mineral and agricultural claimants,

each legal subdivision of 40 acres constitutes a unit. The Government is desirous that placer claims conform to legal subdivisions whenever practicable, in such cases permitting the claims to be entered for patent without further survey or plat. For these and other reasons a knowledge of how public land is surveyed and divided is essential.

*As a starting point for the surveys a prominent landmark is taken in different localities as an 'Initial Point.' Through the initial point a 'Principal Meridian' is laid off, running north and south and conforming to a true meridian, and also a 'Base Line' running east and west and conforming to a parallel of latitude (Fig. 1). The correct method of designating this initial point is to refer to the base line and the principal meridian that intersect at the point, as Salt Lake Base and Meridian, abbreviated S. L. B. & M.; though the general way is to refer to the meridian only, as Salt Lake Meridian, abbreviated S. L. M. The above is the designation of the initial point upon which the land surveys of the State of Utah are based, the initial point being in Salt Lake City. For the State of Idaho, the Boise Meridian, having its locus at Boise, Idaho, is used. California and Nevada make use of the Mount Diablo and San Bernardino meridians.

There are initiated from the principal meridian at intervals of 24 miles, east and west lines conforming to parallels of latitude, and similar to the base line. These are successively known as 'First Standard Parallel North', 'Second Standard Parallel North', 'First Standard Parallel South', etc., as these lines may be north or south of the initial point and base line. From the base line are initiated north and south lines at intervals of 24 miles, known as 'Guide Meridians'. Since all north and south lines converge toward the poles, these guide meridians are started anew from each standard parallel in contradistinction to the principal meridian which runs directly without change to the confines of the area governed thereby. These lines, though broken and displaced each 24 miles, are known and numbered

*From author's article, 'Surveying the Public Land of the United States,' in *Mining and Scientific Press*, January 29, 1910.

successively from the principal meridian, as 'First Guide Meridian East', 'Second Guide Meridian East'.

Special base lines and meridians have been established to govern lesser areas remote from the main initial points where it was impossible or impracticable to carry the standard parallels over the mountains. The Uintah Base and Meridian, governing the northeast part of Utah, is an example. Local standard parallels or guide meridians have sometimes been established where necessitated.

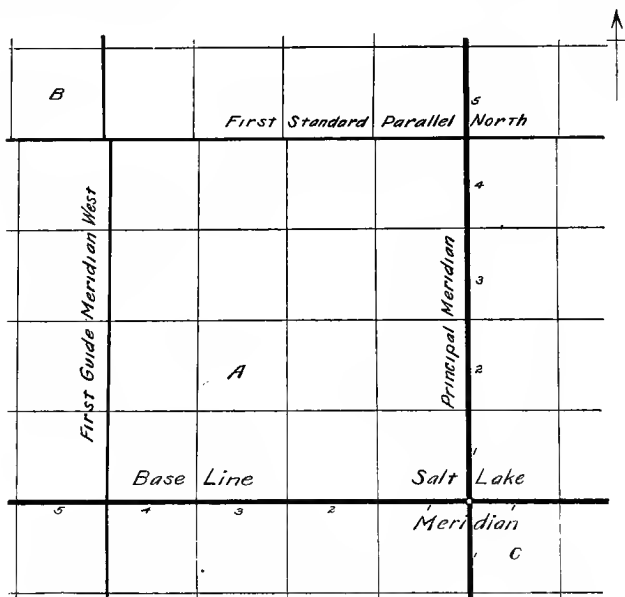


Fig. 1. DIAORAM ILLUSTRATING DIVISION OF LAND INTO TOWNSHIPS

The tracts, 24 miles square, are subsequently divided into 'Townships', 6 miles square, by east and west lines intersecting north and south lines. The townships in turn are divided into

36 tracts, known as 'Sections', each one mile square, and containing 640 acres; these are numbered as shown in the diagram (Fig. 2). Only the exterior boundaries of the sections are run by the Government, but corner stones or monuments are placed each half-mile on these lines, that the sections may be readily divided into 'Quarter Sections'. Each quarter section is held to contain four square 40-acre tracts—'Quarter-Quarters'—the smallest legal subdivision; though the Government in the case of patenting placer claims conforming to the land surveys does recognize and allow entry on 10-acre tracts, that are the regular subdivisions of these 40-acre subdivisions.

Any row, or series of continuous townships, extending east and west, is spoken of as 'Townships', though the proper term is 'Tier', but the latter is not used. Any row or series running north and south is known as a 'Range.' A township in the first row of townships north or south of the base line and initial point or meridian is designated as Township 1 North, or Township 1 South, while a township in the second row becomes Township 2 North, or Township 2 South, etc. Similarly the rows of townships east and west of the principal meridian and the initial point are known as Range 1 East, Range 1 West, Range 2 East, Range 2 West, etc. By co-ordinating these systems of numbering, easy reference can be made to any township. In the diagram, the township designated by A is known as Township 2 North, Range 3 West, Salt Lake Meridian, and is abbreviated T. 2 N., R. 3 W., S. L. M. Likewise the township indicated by B is T. 5 N., R. 5 W., S. L. M., while C is T. 1 S., R. 1 E., S. L. M.

The method of surveying a township into sections, the exterior boundaries of the township having been run, and all monuments on these lines having been placed, is ordinarily to start from the south boundary of the township and close the survey on the east, north, and west boundaries. Starting from the southeast corner of Section 35 on the southern boundary of the township, the surveyor will run a line north, noting the topography of the country he passes over and recording the distance in chains of 66 ft., or 80 to the mile. At 40 chains, or one-half mile, he will set a rough undressed stone or a

dressed post, called a 'Quarter-Section Corner'. This stone will probably be 8 by 12 in. by 2 ft. long and will be set with two-thirds to three-quarters of its length in the ground. If a post, it will be 3 ft. long by 3 or 4 in. square. On a side parallel to the direction the line is being run will be chiseled ' $\frac{1}{4}$ ' if a stone, or inscribed ' $\frac{1}{4}$ S', and the numbers of the sections it stands for, if a post. Should any trees over 3 in. in diameter be found within 200 ft. of the corner, one in each section will be marked on the side directly facing the corner by being blazed and having cut into the blaze the initials B. T. and the abbreviated section in which the tree stands. These trees are known as 'bearing trees', and are recorded in the surveyor's notes. From this corner the surveyor will continue north another 40 chains, making a full mile, where he will place a stone or post for the section corner common to sections 25, 26, 35, and 36. This monument should be set with its edges facing the cardinal points; on the east corner should be chiseled or cut one notch to denote that it is one mile from the east boundary of the township, while on the south should be one notch to indicate that it is one mile from the south boundary. If a post, it will bear in addition the sections for which it stands, and the township and range. A mound of rock will be raised beside the monument, and any suitable trees blazed as bearing-trees with the initials B. T. and the abbreviated section, township, and range in which they stand. From this corner the surveyor will run east on a random or trial line, setting a stake for a temporary quarter-section corner at 40 chains. Running another 40 chains, and arriving on the east boundary of the township, the surveyor measures and calculates his error in bearing and distance in striking the section corner to sections 25, 30, 31, and 36, that was placed when the township boundaries were run. Returning from this corner on a true line to the corner for sections 25, 26, 35, and 36, he sets permanently, in the proper place, midway between the two section corners, the quarter-section corner that was temporarily marked. From the corner for sections 25, 26, 35, and 36, the surveyor will run north one mile and east one mile, as before, and continue in this way, marking all section corners on the east and south edges with

cuts or notches indicating the number of miles the monument is from the east and south boundaries of the township. The last mile on the north (between sections 1 and 2) will be run in a way similar to the east and west lines, so that the line may close on the corner already in place on the north boundary of the township. Where the north boundary of the township is a base line or standard parallel (formerly called a 'Correction Line'), the north line between sections 1 and 2 will be run as a true line without reference to the corner already existing on the township boundary. A 'Closing Corner' will be set where the section line intersects the standard parallel or base line as the closing-corner of sections 1 and 2 only. This corner will bear the letters C. C. on the south, facing the township it represents, and notches or grooves to indicate the number of miles it is from the corners of the township, in this case one on the east and five on the west. This is the plan of marking section corners on township boundaries. It will be noticed that notches on these corners will always total six, and are on the opposite faces of the monuments instead of on edges adjacent and quartering toward each other, as in the case of section corners within townships. For illustration, the corner to sections 19, 24, 25, and 30 on the township boundary line will have two notches on the south face and four on the north.

All lines will be carried from the southern to the northern boundary in this way. The closing on the west boundary will be done by means of trial or random lines, just as the north and east boundaries. Closing-corners are placed in the interior of a township only when it has been surveyed in part at different times, and it is impossible to close within proper limits the lines of the later survey upon the corners of the earlier one.

A township corner is a monument marking the corner of a township. Due to the necessity of making corrections along the standard parallels to correct the convergence of the meridians or of joining old surveys to new ones, a township corner may be the corner of from one to four townships. There are certain methods of marking corners to show this or other facts, but the details would only be confusing to any but surveyors. A corner common to four townships bears six notches on each

of the four corners of the post or stone. One common to two townships, or referring to one alone, is marked by six notches on two edges facing toward these townships. Township corners on base lines or standard parallels bear six grooves on three faces. Township corners that are closing township corners bear the letters C. C., and three sets of six notches. Such corners must necessarily be placed along the standard parallels when the 24-mile tracts are surveyed into townships; they also occur in joining different surveys. When it is impossible to place a corner in the proper place due to inaccessibility, a corner is placed on the line as near the proper point as practicable; this is called a 'Witness Corner', and bears in addition to the usual markings the letters W. C. Where rock is not available for a mound, pits may be dug and the earth raised as a mound. Stone monuments and mounds of rock are to be preferred to wooden posts and earth mounds, as being more substantial. Recently new corners have been adopted, being iron pipes surmounted by brass caps, similar to the bench marks of the Geological Survey. Mounds and pits will accompany them as with the old-style corners. Trees should be marked by the surveyor; those intersecting the line by two opposite blazes facing the directions of the line; those within a half chain by two blazes quartering toward the line. Brush should be cut to indicate the line.

By the method of surveying, all the error in measurement is thrown on the north and west boundaries of the townships; for this reason the outside quarter sections on these boundaries are reported and sold according to the measurements returned by the surveyor, the other tracts being presumed to be of full area. This error is platted into the outside tier and range of 40-acre tracts on these boundaries. These particular subdivisions are called 'lots', and in these sections are numbered as shown in the diagram (Fig. 2). Any tract of the 40-acre subdivision class that contains more or less than 40 acres as officially described is called a lot. Also, any part of a 40-acre subdivision that may be cut off and left remaining by a piece of land, the title of which has passed from the Government, is called a lot. There can be no regularity in numbering such

lots as can be seen in the case of the lots made in sections 9 and 16 of the diagram, by the issuing of patent to the group of mining claims indicated.

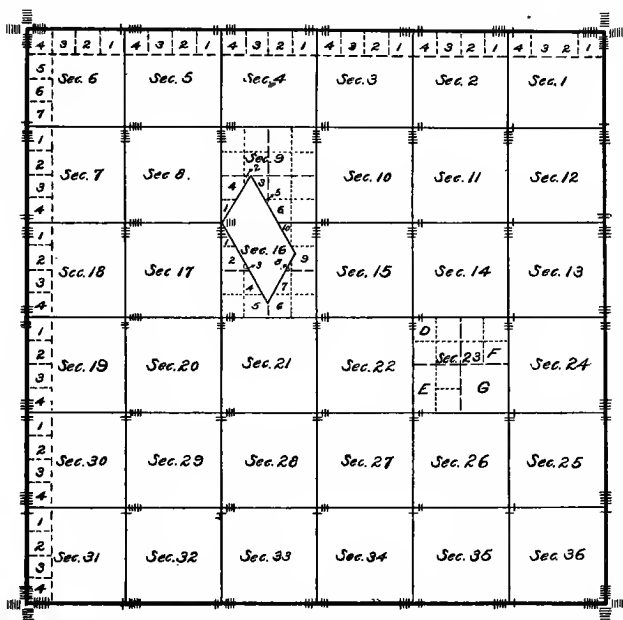


Fig. 2. DIAGRAM ILLUSTRATING DIVISION INTO SECTIONS AND SUBDIVISIONS, ALSO METHOD OF MARKING CORNERS

Though the Government does not subdivide sections, it issues the following instructions for such procedure: First, determine the boundaries of the section by the established corners, then divide into quarter-sections by running intersecting lines from the opposite quarter-section corners. To still further reduce by dividing the quarter-sections into quarter-quarters (40-acre subdivisions), locate quarter-quarter corners at points midway

between the section and quarter-section corners, likewise between the quarter-section corners and the centre of the section as determined in dividing into quarter sections. Then run intersecting lines from these quarter-quarter corners. In subdividing the quarter-sections on the last half mile of the lines closing on the north or west boundaries of the township, where the errors in measurement are thrown, the inside rows of quarter-quarters are made exact by measuring 20 chains along the section lines from the quarter-section corners, the outside rows of quarter-quarters becoming lots of various areas.

The nomenclature of the subdivision of a section is simple. In the diagram (Fig. 2) the tract indicated by *G* is the southeast quarter of section 23, abbreviated the SE. $\frac{1}{4}$ sec. 23; *E* is the west half of the southwest quarter, abbreviated the W. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 23; the quarter-quarter *D* is the northwest quarter of the northwest quarter, abbreviated the NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 23; *F* is the southeast quarter of the northeast quarter, abbreviated the SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 23. A 10-acre placer claim conforming to legal subdivisions and situated in the extreme northwest corner of *G* would be the NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 23.

After completing the survey, the surveyor will file a copy of his field notes with the surveyor-general, who binds them in a book open for inspection by all upon application. The surveyor also files a map of the township, which is open for inspection and tracing. These maps are made by entering on the plat the topography of the section lines as found in the field notes of the surveyor and connecting these according to the sketches in the surveyor's field book. The fact that the interiors of the sections are only sketched in, and consequently creeks, roads, etc., are often wrongly connected or misplaced in the interior of a section, should be remembered when trying to fit the known topography of a section to the map of the same. The topography of the section lines should be accurate, and generally is.

After the notes and plat have been filed with the surveyor-general, the Government sends an examiner who inspects the survey, measuring a number of the lines and endeavoring to determine if the survey has been properly made, marked, and

returned. In case errors are found, the surveyor is required to return and correct his work; this frequently happens. The errors and omissions of the surveyor may consist in initiating his surveys from wrong corners, in putting up poor corners, in failing to mark his line, or in willfully neglecting to run lines or set corners in a difficult part of the country where it is expected that the examiner will not go. Errors in measurement and alignment are sometimes found, though these should not occur, since by the method of surveying there is a constant check on the work. At first, previous to the 'eighties', examinations of surveys were not made, but so many irregularities resulted, willful and otherwise, that all are now inspected. Gross irregularities are often found after a survey has been accepted, such as a corner being a quarter of a mile from its proper point, but after a survey has been accepted the corners hold and cannot be changed.

All lines do not run due north and south or east and west, or the prescribed theoretical distance. Many of them vary in small amounts, and occasionally some vary greatly for a short distance. This is only done when necessary to close surveys, and is fully shown in the notes and plats.

With the passing of time the corners or monuments disappear. Men may intentionally or unintentionally remove them; cattle may tear them down; the elements and the various forces that change the surface of the earth may obliterate them. Anyone who has observed the condition of patented claim-stakes on a steep hillside subject to much snow can understand how these corners disappear. Corners that have disappeared may be restored by running lines from existing corners in the vicinity, or a re-survey of a township or locality may be ordered to be made, starting from known corners and following the notes of the old survey.

CHAPTER III

Where Locations May Be Made

R. S., SECTION 2319. All valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed are hereby declared to be free and open to exploration and purchase, and the lands in which they are found, to occupation and purchase, by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States.

Only public domain is open to mineral location, and there are parts even of it that are not open to location, though it is not necessarily true that only unoccupied unclaimed public land can be located as mining claims. It is the policy of the Government that the public land shall be put to its most useful purpose, and in accordance with this policy, the Land Department will receive a protest, and, under proper conditions and satisfactory representations, will undertake to determine for what purpose the land is most valuable, and will render judgment accordingly, up to the time the land leaves its jurisdiction by the issuing of patent, or until by some specific act of congressional or presidential legislation, the land is removed from its jurisdiction. However, the Land Department will not undertake any determination of the rights of rival claimants under different classes of possession or entry, until patent is asked for the land in question, except in flagrant cases of the land being occupied in bad faith to the detriment of good public policy and the exclusion of *bona fide* locators and entrymen.

Land to which patent has been obtained, or which has been approved or certified to the applicant by the Government—

which is the same as passing title—cannot be entered upon for location, except the patent be broken. The Government will not undertake to break a patent of any kind, except on the clearest and strongest proof of fraud or serious error of law, proceedings to be initiated within six years of issuing patent as prescribed by the Statute of Limitations, "that suits to vacate and annul any patent * * hereafter issued, shall be brought within six years after date of issuing such patent." Innocent purchasers will generally, if not always, be protected, though the Government may institute suit against the original and defrauding owner or claimant for the value of the land.

No location can be made upon an Indian reservation unless allowed by a specific Act of Congress, but a location existing at the time the reservation was created and closed to further locations, has been upheld by the Land Department as being a part of the public domain excluded from the reservation, and, as such, susceptible of being relocated, should the original locator abandon it.

Military reservations and national parks come under the same head as Indian reservations, and the same principles may be said to govern.

Locations can be made within Forest Reserves, or the National Forests, with the same freedom that any public land lawfully can be entered upon for that purpose.

Lands withdrawn for power-sites, reservoirs, etc., were formerly invariably closed to location, especially where locations might interfere with the purposes of the withdrawal. Though the Land Department said that a location made prior to the withdrawal would be upheld, if "a valid one, that is, founded on actual discovery by the locator of a valuable deposit of mineral within the limits of the claim, and maintained in accordance with the mining laws and regulations applicable", it also said that the withdrawal of land for irrigation or reclamation projects did not withdraw it from mineral location. In general, it was considered that the miner making a location on a withdrawn area was entitled to a preferred right to make a valid location upon the removal of the withdrawal, if no greater right. Locations have been made on this principle upon Indian

and military reservations, but it is a poor method to pursue, for the authorities are usually antagonized by the trespassing of the locator. However, the land-withdrawal law passed by Congress June 25, 1910, now permits mineral locations upon withdrawn areas and clearly defines the present rights as follows:

ACT OF CONGRESS. SECTION 1. That the President may, at any time in his discretion, temporarily withdraw from settlement, location, sale, or entry any of the public lands of the United States, and the District of Alaska, and reserve the same for water-power sites, irrigation, classification of lands, or other public purposes to be specified in the orders of withdrawals, and such withdrawals or reservations shall remain in force until revoked by him or an Act of Congress.

SEC. 2. That all lands withdrawn under the provisions of this Act shall at all times be open to exploration, discovery, occupation, and purchase, under the mining laws of the United States, so far as the same apply to minerals other than coal, oil, gas, and phosphates. Provided, that the rights of any person who, at the date of any order of withdrawal heretofore or hereafter made, is a bona fide occupant or claimant of oil or gas-bearing lands, and who, at such date is in diligent prosecution of work leading to discovery of oil or gas, shall not be affected or impaired by such order, so long as such occupant or claimant shall continue in diligent prosecution of said work. And provided further, that this Act shall not be construed as a recognition, abridgment, or enlargement of any asserted rights or claims initiated upon any oil or gas-bearing lands after any withdrawal of such lands made prior to the passage of this Act. * * * * *

Tide-lands are not such public lands as locations may be made upon, though beaches have been mined by special permission. Likewise, lands lying under navigable rivers are not public lands within the meaning of the mining laws.

A location can be made upon the land of a homestead or other agricultural filing or entry of public land, if patent has not yet been issued and presuming that the location can be made peaceably and without trespass. The courts have always declared and upheld that a valid location cannot be made fraud-

ulently, clandestinely, forcibly, or by trespass. Just what acts or conditions may be construed as coming under the above debarment, varies with the circumstances. The aim is to prevent breaches of peace and homicides. Where the agricultural claimant prevents a location from being made, and also where the location is placed but not excepted from the homestead entry, protest should be made to the local land office asking that the ground in question be declared mineral and removed from the homestead entry. In the hearing or contest before the register and receiver of the local land office as a result of the protest, the question to be determined, and the one on which judgment will be rendered, is, for which is the land more valuable, mineral or agricultural purposes? Protest that all or part of a homestead or other agricultural filing is mineral in character and more valuable for mineral than other purposes, may be made up to the time patent actually issues, when based upon mineral discovered before the issuance of the final certificate by the receiver of the local land office as a result of the submission of 'final proof' by the agricultural claimant that he has complied with the law and is entitled to receive patent. The burden of proof in contest cases between mineral and agricultural claimants will be on the second entryman (a homestead or other agricultural application may also be filed upon ground held by mineral location) in accordance with the following rule: The land is carried upon the plat books of the local land office as mineral, agricultural, or other land according to the designation given by the deputy surveyor who surveyed it into sections. While the classification is official, it is only the general opinion of the surveyor, and has no other weight than to throw the burden of proof one way or the other. When a homestead or nonmineral application is accepted by the local land office on a tract of land classified by the surveyor as mineral, it now gives the tract a new classification as being agricultural or other, and any locator of a mining claim will have the burden of proof of overcoming the agricultural or other classification, no matter whether his location was made before or after the homestead application. Where the land has been returned as nonmineral by the surveyor, a mineral location does

not give it a mineral classification, since the land office has no knowledge of mineral locations, and if the matter is brought to their attention they have no positive information as to the exact ground in conflict; also, a mineral location is initiated so easily, and is often so transitory in character, that to allow it to overthrow a subsisting official classification would cause endless trouble and confusion. It requires an application for patent to the location to overthrow the previous nonmineral classification and throw the burden of 'proving off' the mineral on any contesting agricultural or other nonmineral applicant who attempts to file an entry, or who files a protest after the application for mineral patent.

Each legal subdivision of 40 acres is considered as a unit for most purposes, though in connection with placer locations 10 acres is recognized. If a mineral location is allowed to remain upon a tract as the result of a contest, the whole 40-acre subdivision is removed from the agricultural entry, though by having survey made, the mineral ground removed from the tract, and official recognition made of the lot remaining, the agricultural entry may be extended to include the lot.

Because a tract has once been classified as the result of a hearing or contest, does not prevent the asking of a new hearing and a new classification based on new and subsequent developments. The result of a land office hearing or contest does not give the land to the winning contestant; it only classifies the land and removes the protest, so that he may now proceed unrestricted to patent in the usual way or continue to hold possession as before. After agricultural patent has been obtained, no location of the land can be made, except the patent be broken on grounds of fraud or error of law.

It has been the custom of the Government to grant the States and reserve for the Territories a certain section or sections of land in each township, usually 16, or 16 and 36, and in some cases 2 and 32 additionally, to be sold for the benefit of the schools and other public purposes of the State. The title of these school sections passed to the State when admitted to the Union, or at the time of the granting Act, if the land was already surveyed into sections. If the sections are surveyed at

a later date, they pass to the State on the approval of the survey. If these sections are known to be valuable for mineral at the time title should pass to the State, this title is withheld by the implied terms of the grant, and remains in the United States as reserved mineral land. The attitude of the different States varies on the subject of locating or prospecting for mineral on State land, but generally a liberal view is taken, with the idea of encouraging the mining industry. Where the land is purchased from the State, the purchaser takes it subject to the limitations of the grant to the State; consequently, he is not entirely safe from having ground which was known to be of mineral character at time title passed to the State, entered upon and patented away from him as mining ground, notwithstanding that his patent obtained from the State is supposed to cover all the ground. Where the mineral character of the land has been discovered since the title passed to the State, the land cannot be located upon unless it is known that the State or its grantee will give their consent; such land should be purchased from the State or its grantee. In asking for patent to a mining claim upon one of these original school sections, the applicant must be prepared to show, should the State or its grantee protest against the allowance of the patent, that the land was known mineral land at date title should have passed to the State, and that at the present time the ground sought to be patented as a mining claim is more valuable for mineral than for any other purpose.

To reimburse the State for lands lost to it through prior occupation or by reason of the mineral character of the land, also to cover floating grants to the State, it is allowed to select other lands called 'lieu', 'indemnity', or 'selection' lands. These must be nonmineral in character and come under practically the same rules as homestead entries, in that locations may be made, the character determined, or the allowance of the entry protested against, at any time up to the approval and certification of the entry to the State by the General Land Office. After the approval and certification of these lands, they cannot be entered upon for location, whether known to be mineral in character before the allowance of patent or otherwise.

In the railroad grants the Government has included with the right-of-way strip all the mineral, except that of pre-existing and valid locations. In the alternate or original sections granted the railroads, the grants impliedly or otherwise reserved the mineral lands, with the exception of coal and iron in some cases. While the railroad company has title to these under its grant, claims can be located upon any of this land up until it is patented under the railroad grant, whether the mineral was known or unknown at the time the grant attached. After patent is issued to a tract of land under the railroad grant, no future discovery of mineral will authorize or allow a mineral location, but suit can be brought through and by the U. S. on mineral known before issuance of patent to cancel the agricultural patent and thus throw the land open to location. Such suits must be brought within six years of the issuance of patent as prescribed by the Statute of Limitations, while strong proof of the known mineral character of the land at time patent was issued and its high value as mineral land must be made.

By the terms of some of the Mexican grants the mineral land was reserved and title now remains in the United States; in others it was not so reserved. Each case should be investigated.

Townsites upon public lands of a mineral character are provided for by the Statutes. Because of the somewhat conflicting Acts and decisions, and the variety of conditions met with, the law is not entirely clear, but the following are the general principles. The law contemplates giving titles to lots of land occupied for business or residence purposes, but with the right to mine paramount to other occupation or use of the land. Consequently, the law purposes that mining claims valid by reason of a mineral discovery prior to occupation of the land for townsite purposes, are to be reserved from townsite patent; likewise, but to a lesser extent, a valid location made after townsite occupation, but prior to the issuance of townsite patent, will be protected. The status of locations made after issuing of townsite patent and upon ground known to be valuable for mineral before the issuance of patent is more doubtful, but generally they can be sustained and perfected to mineral patent. Locations made and based on a mineral discovery made after

the issuing of townsite patent and upon ground not known as mineral ground in a convincing way at time of issuing such patent, cannot be sustained.

Locations limited to being for gold, silver, cinnabar, copper, or coal can be made upon land filed upon under a Timber and Stone entry up to the time patent is issued, just as in the case of homestead entries.

It will be noted that mineral locations are to be made on mineral lands only, and the question arises, what is mineral land? Mineral land is land more valuable for its mineral contents than for any other purpose. The mere appearance of mineral is not sufficient to give the land a mineral classification, if there are not substantial and lucid reasons for believing that valuable mineral deposits may be eventually opened. Again, the absence of mineral indications will not give the land a nonmineral classification, if it is within an ore-bearing zone or in a continuation of known and proved ore-bearing formations. The extent of the mineralization required to sustain a mineral location varies with the conditions. In the case of a contest between two mineral claimants, very little evidence of mineralization may be required, whereas in a contest between an agricultural and a mineral claimant, the evidence must be more conclusive. In the latter case, while the comparative value of the land for agricultural or mining purposes determines the result, the principal and usually most weighty question is, would a prudent and experienced miner or prospector feel justified or willing to spend his labor or money in trying to develop a valuable mineral deposit on the land?

To further understand what is mineral land it is necessary to know what is mineral within the meaning of the land and mining laws. The Land Department has long held that "whatever is recognized as a mineral by the standard authorities on the subject, where the same is found in quantity and quality [sufficient] to render the land sought to be patented more valuable on this account than for purposes of agriculture, should be treated by this office as coming within the purview of the mining Act of May 10, 1872." The word mineral in the above has been construed to mean substance both metallic and non-

metallic, and to include among all earthy substances and constituents of the earth's crust, salt, phosphate, gas, the various forms of petroleum, and hydrocarbons. There are conflicting opinions regarding such things as stone, sand, and gravel. It will be seen that practically all land would be mineral land were it not for the proviso, "where the same is found in quantity and quality sufficient to render the land * * * more valuable on this account than for the purposes of agriculture." This principle is applied in the case of land containing a deposit of limestone, building stone, or similar, in which the deposit is of more value than the surface is for agricultural purposes.

Land which has been classified as nonmineral by the land surveyor, can be located upon as stated before. Land classified or withdrawn pending classification as coal, oil, gas, phosphate, or other land, can be located upon for other minerals, though it will be under the implied protest of the Land Department when the indications of good faith are lacking, which may throw a strong showing of proof upon the locator, should his location ever be questioned. Protest may be entered against the classification of the land by the Land Department as a result of field examination by its experts or other governmental experts, and a hearing may be asked before the register and the receiver of the local land office to present evidence to overthrow the classification. A second hearing can be asked where new and important developments have occurred subsequent to the first hearing. An appeal from the decision of the local land office on a hearing can be taken to the Commissioner of the General Land Office on grounds of error, etc. A further appeal from his decision can be taken to the Secretary of the Interior. Or it may be carried into the courts on grounds of fraud or gross misinterpretation of the law by the Land Department; such proceedings seldom, if ever, occur before patent is issued or refused. The substance is that there is no hard and fast classification, but that the Land Department will at all times, while patent is being asked for a tract of land, undertake to determine for what the land is most valuable and give entries for that purpose the preference.

Locations cannot lawfully be made or perfected to patent for purposes or uses foreign to those of mining or the development of mineral. Formerly many locations were made to hold ground containing springs, or good for grazing, power-sites, timber, etc. Under the present rigid field examination before approving the entry for patent, such 'bluff' locations cannot be patented, though they may remain as locations until the interests of public policy or the protest of some one with a better right to the land causes their removal.

CHAPTER IV

Who May Make Locations

Section 2319 of the Revised Statutes says that locations may be made and patents obtained "by citizens of the United States and those who have declared their intention to become such." It would be inferred from this that an alien could not make or be protected in a mineral location, but the consensus of opinion is that he can make a location and will be protected against all except the United States. The United States can be expected not to dispossess an alien of his location, except for some other vital reason, but no alien can be a party to an application for mineral patent for the reason that with the application is required a proof of citizenship. Beyond this, his rights will practically be unquestioned, with the possible exception of where they are curtailed by State statutes, or where he stands as an adverse claimant in a suit against a patent application. An alien who has located a claim may, by declaring his intention of becoming a citizen, have his rights dated back to the time of the location. An alien may purchase or sell a location or a patented claim without anticipating trouble.

A corporation chartered in the United States may make mining locations the same as an individual, the corporation being considered as a single individual. Foreign corporations, those organized outside of the United States, are aliens, and if they have rights, they are even less than those of the individual alien.

Married and single women, minors, and even infants, may locate claims or have claims located for them. A location may be made by an agent who has been authorized to do so, or an unauthorized location may be subsequently accepted and ratified. The authorization and ratification may be verbal. An unauthorized, unratified location is of a questionable nature.

By an Act of Congress all officers, clerks, and employees of the General Land Office are prohibited from becoming directly or indirectly interested in the entry or purchase of public land. Subsequent circulars and decisions of the Land Department are to the effect that this prohibition includes all persons under the control of the Commissioner of the General Land Office, embracing the Land Office at Washington and the local land offices, the surveyors-general and their employees, including deputy mineral surveyors and deputy land surveyors while under contract. It appears that the location of a mining claim or the filing upon public land by one of these employees, or by their wives, will, if brought to the attention of the Land Department, result in the dismissal of the employee. In some cases the public-land filings of these employees have been canceled. The Land Department has always required that the name of any of its employees be removed from any application for mineral patent, but it has never passed on a location made by one of its employees. A Utah court, in one instance, and a Federal court in another, held that a location by a deputy mineral surveyor was void, while a Nevada court held that such a location was valid on the undoubtedly erroneously conclusion that a deputy mineral surveyor was not a Land Department employee. It is believed that the courts will generally hold such locations invalid, except where necessary to protect innocent purchasers.

CHAPTER V

Lode Location—Discovery

R. S., SEC. 2320. * * * No location of a mining claim shall be made until the discovery of the vein or lode within the limits of the claim located. * * *

The first essential in locating a lode claim is a 'discovery'. What is a discovery can only be defined in a general way. It must be rock in place, fixed, immovable. Float, the segregated portions of a blowout, or a detached part of a vein, will not constitute a discovery. Mineralization and boundaries are the other requirements. The amount of mineral required varies, in some cases may be *nil*. In a deposit having a general mineralization, without walls, vein formation, or enclosing rock, such as some porphyry copper deposits, appreciable mineralization is necessary to lead to the inference that the deposit may become workable. Where there is a well defined fissure, contact, vein, or belt which has been formed or changed so as to warrant the belief that payable mineral will be met with by following the lead, vein, or lode, but little or no mineralization may be required. It has been generally held by the Land Department, and by many of the courts, that "a valid location of a mining claim may be made whenever the prospector has discovered any indications of mineral, so that he is willing to spend his time and money following it with the expectation of finding ore." This holding of some of the courts, where the question of discovery is involved, that anything is a lode which a miner would be willing or justified in following in the expectation of finding ore, appears to be a proper definition of the term lode as used in connection with mining law. It may be further noted that lode, vein, lead, or ledge have the same meaning in mining law, but that the term lode is more comprehensive, and, being a more suitable term for deposits of vein character which may not

strictly be veins as understood by miners and geologists, should be generally used.

The evidence required for a discovery varies greatly with the conditions. Between rival locators of a claim, slight evidence is required on the part of the first discoverer, especially if he is the prior claimant. Likewise, but slight evidence is required to satisfy the law in case of application for patent, especially where the application is *bona fide* in every respect. The discovery of a contact between igneous and other rock, such as between granite and limestone or quartzite, or a contact along a dike, may be sufficient to justify the miner in tunneling or sinking on the contact in the expectation of finding ore. Or a change from an altered country rock to a silicified rock with a slight but definite mineralization, may encourage the miner by indicating that he is near an orebody or in a zone which has been subject to the conditions under which veins and ore deposits are formed. But while there are no hard and fast rules or technical requirements as to what does or does not constitute a vein or lode, every mineral stain, crevice, alteration, or silicification cannot be taken as a discovery. There must be some logical reason, something beyond a mere hope or unwarranted belief, for assuming that payable ore may eventually be found. However, this need not be based upon the opinions of expert miners and geologists. The evidence required to support a lode discovery in a placer claim, or against an agricultural entry, is much greater, and in the latter case becomes to a large extent a question of comparative value, in which the border line between what constitutes a valid mineral discovery and for what is the land most valuable, cannot be distinguished. In these cases a heavy burden of proof rests on the second claimant in trying to dispossess the first entryman.

Despite the fact that there is no question but that a location is not valid unless based on a mineral discovery within the lines and on the actual ground of the claim, a large number of locations are made without a mineral discovery, and this in the face of the further fact that such a discovery can be made on most locations by some prospecting and effort. Many lode claims are located for legitimate mining purposes upon ground which

it is not intended to develop as contemplated by the lode-claim laws, but which are taken up in addition to the actual mineral area which it is intended to develop, for the timber, for millsite and townsite purposes, or for protection. An attempt should be made to have a mineral discovery upon each of these claims. Often they can be located so as to include such a discovery. In locating a claim, it is expected, should the ground eventually be thought valuable, that patent will be obtained for it. The Government has recently inaugurated the practice of having the ground of all applications for mining patent examined by a mineral examiner of the Field Service of the General Land Office, and if within a Forest Reserve, by a representative of the Forest Service also. While these examiners may not necessarily question the sufficiency of the mineral discovery on the ground of every *bona fide* mining claim which does not appear to be more valuable for some other purpose, they will usually require strong evidence of a discovery on claims that appear to be more valuable for other purposes than mineral development and mining.

If the discovery is made within the lines of the location, but upon ground which overlaps and is claimed by a prior or senior locator, the newer or junior location is invalid, inasmuch as it has no discovery. The finding of a mineral discovery upon the ground actually claimed by the junior location, or the appropriation of the conflicting ground of the senior location after it has been abandoned or become forfeitable by failure to do the annual or assessment work, and the adoption of the mineral discovery thereon, will validate the junior location.

The mineral discovery may be anywhere upon the actual ground of the claim and not necessarily in the discovery shaft or on the centre line of the claim, except where State statutes might attempt to require it. The discovery may be made any time after the location is made, so long as it is before the discovery of any rival locator.

The position of a locator attempting to hold a location without a mineral discovery cannot be fully defined. The locator is entitled to be protected in his occupation of the ground, especially while trying in good faith to make a mineral discovery.

Under the law, other locators are also entitled to go upon the ground, so long as it can be done peaceably and without interfering with the first claimant, and under such conditions to attempt to make a discovery. In the case of these rival claimants, the claim goes to the one making a discovery first. Usually, miners will not interfere, and the courts will be lenient, so far as they are able to be so, where the claimant is working in good faith to develop mineral; but it must always be remembered that the Statute is clear and specific, and fully supported by court decisions, in saying that a location is not valid until a discovery is made. The locator need not be the first to find or uncover the mineral discovery; he may appropriate any sufficiently strong indication of the proximity of valuable mineral deposits or any exposed lode, whether it has been revealed by nature or man. After patent is issued, the patent cannot be attacked on grounds of no mineral discovery.

CHAPTER VI

Lode Location—Discovery Work

The difference between the mineral discovery, the discovery work or discovery shaft, and the discovery or location point, stake, or monument often spoken of as 'the discovery,' should be clearly understood. The mineral discovery is the actual discovery of mineral required to validate a claim according to the Statute, as explained in the previous chapter. The discovery work or shaft is work required by the statutes of certain States in connection with the making of a location, as will be explained in this chapter. The discovery or location point, stake, or monument, 'the discovery,' is what has become a technicality in connection with the locating and patenting of a lode claim.

It was originally presumed that when the miner made a mineral discovery or found a vein, he would erect alongside of it a discovery or location stake or monument, on which he would place a location notice claiming so many feet in each direction along the lode 'from this discovery', and so many feet on each side, and would subsequently sink a shaft or perform other work upon the mineral at this point, which work would be known as the discovery shaft, though the term discovery work would be more applicable, since the work may be a cut or tunnel instead of a shaft. In this way 'the discovery' containing the mineral discovery, the location monument, and the discovery shaft or work, became a point on the centre or lode line of the claim from which the claim could be measured in all directions. In taking up claims side by side, or fractions of claims open to location, it was of course impossible to find a vein, lode, or mineral at each of the desired points to place the location monument claiming the maximum amount of ground. This led to the placing of a location or so-called discovery stake or monument at any point required in the course of blocking out the

claim, and assuming the centre line of the claim passing through this monument as a theoretical lode or lode line. To give color to this form of locating, the discovery work is sometimes performed at the location stake, even though the mineral is elsewhere. This is the plan pursued when there is no mineral on the claim. While there is no real sanction in the law for this method of locating and presuming a lode where none exists, it has become a custom, largely perhaps because in surveying and platting a claim for patent it is always required that a discovery post be placed on the centre line of the claim and this centre line be considered as a lode. The best example of this is seen in examining the plat of a group of claims which have been patented. Each claim is shown with a 'discovery' on the centre or theoretical lode line of the claim. In the field will be found a post or monument at the represented discovery, and often a small shaft, but, in the majority of cases, no mineral.

The mineral discovery and discovery work or shaft may be anywhere about the claim and not necessarily at a location stake on the centre line, except where State statutes attempt to require it. Such a requirement of what under the present conditions is inconsistent and almost impossible in the majority of cases, is of doubtful propriety and has been a source of confusion.

The Federal Statutes and Land Department regulations require no development work in the process of locating a claim, but the statutes of all States do, except in California, Utah, and Alaska, in which no such work need be done. This is the discovery shaft or discovery work. Colorado, Montana, Idaho, North Dakota, Oregon, South Dakota, and Wyoming allow sixty days from date of location in which to perform the discovery work. Arizona, Nevada, New Mexico, and Washington allow ninety days. The statutes of those States requiring discovery work, except Arizona, are uniform in stating that the shaft shall be ten feet deep from the lowest part of the collar or rim at the surface, or that an equivalent amount of work shall be done, such as a cut or tunnel equal to such a shaft having a 4 by 4-ft. or a 4 by 6-ft. area, and usually requiring that the shaft or equivalent work cut the vein or lode ten feet or more below

the surface. It is immaterial if the work is performed within the required time or afterward, provided no other and adverse location of the claim is made after the expiration of the statutory time and before the completion of the work. The statutes of the particular State should be examined. Each claim must have its own discovery work. The work may be performed by extending the previous work of an abandoning or forfeiting owner. There is no relation between discovery work and assessment work; each is to meet a separate requirement. The discovery work is entirely applicable toward the assessment only when performed within the year following the initial steps of location, but may be applied on the \$500 expenditure for patent purposes at any time.

CHAPTER VII

Lode Location—Location Notice

The miner contemplating making a location, may find three distinct but usually more or less allied conditions. He may find an area in which the formation and rock exposures indicate to his experienced eye the likelihood of ore deposits, and within which area he wishes to have the privilege of prospecting until he can determine just what ground he wants. He may find a mineral discovery or vein and wish to locate it, or he may want to take up a certain area left open by other locators.

In the first case, the miner having found a likely spot to prospect, has some right to have the ground reserved for his location pending his efforts to make a discovery, lay out his claim, and erect the stakes. This right, which is granted by custom and a sense of equity, and not by any Federal or State statute or regulation, can only be contingent upon actual possession and exploration of a small area of ground during the period usually allowed to complete a location, which in some States may be as long as ninety days. To further strengthen this right, a notice should be posted stating that the right to prospect the ground and perfect a location within the statutory length of time is claimed.

In the second case, the miner having made a discovery by finding the outcrop of a vein or other signs of a lode, for the purpose of holding the same until he can determine the course of the vein, decide what ground he wants, and place his corner stakes, may erect a post or monument of stones and place upon it a notice stating that he has appropriated the lode. Such a notice may read:

Having discovered this lode, I claim 1500 ft. of it in length, 300 ft. on each side, and the full length of time for perfecting location.

JOHN D. STRANGE.

May 19, 1910.

This notice may be made longer and more complete, and again it is not necessitated by any Federal Act or regulation, though State statutes may require it. However, it is the best method of holding the ground until the location can be perfected, and one that the courts are bound to recognize and protect, for the reason that it is based on an actual mineral discovery. While the above notice presumes that the 1500 ft. will be measured along the general course of the vein, in reality, in most cases, the claim can be swung about the discovery in any direction. Generally such a notice would cause other locators to keep 1500 ft. in all directions from the discovery, though the courts, under a strict construction, would allow only 750 ft. in each direction along the vein or lode line, unless the notice claimed the 1500 ft. differently. The above location claims the maximum area of ground; less can be taken if desired.

Having made a discovery and placed a discovery or location post or monument, either with or without the above preliminary location notice, the next step is to trace the apparent course of the vein and decide what ground is wanted. After this, the miner should stake his claim by placing posts or monuments to mark its position and boundaries, sink a discovery shaft if required by State statutes or district rules, and place his location notice upon the ground and record the same with the county recorder of the county within which the claim lies, and also with the mining district recorder where there is one.

The notice last spoken of is the real location notice. The Federal Statutes do not require a location notice to be prepared, placed on the ground, or recorded, though most of the State statutes do. Nevertheless, the use of the location notice or certificate and the recording of the same has become so universal that custom has almost made it mandatory, even in the face of the ruling of the courts that it is not required in the absence of State statutes or district rules to that effect. Utah and California allow thirty days from date of location within which to record the location notice. Montana, North Dakota, Oregon, South Dakota, and Wyoming allow sixty days. Alaska, Arizona, Colorado, Idaho, Nevada, New Mexico, and Washington allow ninety days to three months. The location notice posted upon

the claim needs be a simple notice only, claiming the lode without details, except where State statutes direct more; but the notice filed for record must be more complete, in accordance with section 2324 of the Revised Statutes, which says, "all records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or claims located by reference to some natural object or permanent monument as will identify the claim." The best practice is to word the location notice placed upon the ground the same as the one filed for record. The one filed should contain all the information required by the Federal and State statutes and district rules. The location of the claim and its boundaries should be described as fully as possible, so that it may be easily found and distinguished. It has been held that the requirement that the claim be "located by reference to some natural object or permanent monument as will identify the claim" is met by the claim corner posts or monuments. But the Statute undoubtedly means some more permanent, striking, and immovable monument, and in consequence the claim should be tied to, or located by, some easily identified or well known object. Legal verbiage and provisos in the location certificate should be dispensed with, for it cannot be understood how any greater rights or privileges can be obtained than those given by the simple statement that the ground is located as a lode mining claim. The requirements of all the State statutes have been gathered into the following list:

1. Name of lode or claim.
2. Name or names of locators.
3. Date of location.
4. Length of claim on each side of discovery or location monument.
5. Width of claim on each side of lode or centre line.
6. Course of lode or centre line.
7. Reference to natural object or permanent monument as will identify the claim.
8. Location and description of each corner.
9. Name of mining district, county, and State.
10. Intention to locate as a mining claim (New Mexico only).

11. Affidavit of citizenship, familiarity with the ground, and that none is claimed adversely, and that discovery work has been performed (Idaho only).

12. Distance and direction from discovery monument to natural object or permanent monument (Idaho only).

13. Verify location notice as an affidavit (Montana only).

14. Dimensions and location of discovery work (Nevada only).

15. Affidavit of performance of the discovery work (Oregon only).

16. Reference to quarter-section or section corner, if upon surveyed land (Wyoming only).

The following is a good, brief, but comprehensive form of a location certificate, and contains the first nine requirements, to which should be added any of the additional seven requirements which may be necessary. Fig. 3 is a diagram of the claim.

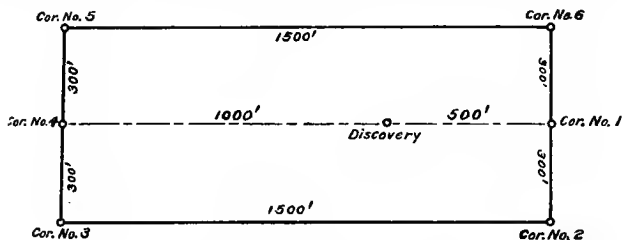


Fig. 3. LODGE MINING CLAIM LOCATION

I have this tenth day of July, 1910, located the Exchequer Lode Mining Claim on this ground, claiming 1500 ft. in length along an easterly and westerly lode line through this discovery, and 300 ft. on each side of same, as follows:

Beginning at this discovery point and monument, and running easterly 500 ft. along lode or centre line to the east centre end-line stake—Corner No. 1—, thence southerly 300 ft. to the southeast corner stake—Corner No. 2—, thence 1500 ft. westerly to the southwest corner stake—Corner No. 3—, thence 300 ft. northerly to the west centre end-line stake—Corner No. 4—, which is 1000 ft. westerly along the lode or centre line from discovery, thence 300 ft. northerly to the northwest corner stake—Corner No.

5—, thence 1500 ft. easterly to the northeast corner stake—Corner No. 6—, thence 300 ft. southerly to the east centre end-line stake—Corner No. 1; all corners being wood posts set in stone monuments, and inscribed with name of this claim and their number and position.

This claim lies about one-half mile south of the Horace Greeley claim, survey No. 4876, and on the north side of Red Mountain near its foot, in the Calico Peak Mining District, San Bernardino County, California. It joins on the west end-line of the May Day claim, and on the north side-line of the Greenwater.

JOHN D. STRANGE, Locator.

The location notice may be written on a post or blazed tree. It may be written on a board or paper and tacked to a post or tree. The notice has even been folded and placed, with a corner projecting, between two flat stones at the top of a stone monument. The better way is to put the notice in a box, or in a bottle or tin can turned upside down to prevent entrance of rain, and set in a conspicuous place in the rock monument. If a post is used, the can should be nailed to the post in an upside-down position. If the location notice is once properly posted and proof of that fact can be made, the locator cannot be made to suffer on account of the disappearance of the notice. Hence the advisability of having a witness to the location and his signature attached to the certificate filed for record.

CHAPTER VIII

Lode Location—Laying Out and Staking

Before 1866 the length and width of lode claims was not uniform. The Act of Congress of 1866 limited the location of a single locator to 200 ft. in length along the lode, and to an unspecified width to be fixed by local rules, while a consolidated single claim of an association of persons was limited to 3000 ft. along the lode. This will explain the long, narrow shape of the older patented claims.

The Act of 1872 regulates the present maximum size of claims as follows: "shall not exceed 1500 ft. in length along the vein or lode" and "no claim shall extend more than 300 ft. on each side of the middle of the vein at the surface" (R. S., sec. 2320). Most of the small and narrow claims located but not patented before the passage of this Act were subsequently amended to take in the maximum area. The statutes of Colorado, North Dakota, and South Dakota prescribe a smaller area than the Federal Statutes (see Appendix A). It was the intent of the law to give each location only 1500 ft. in length along the outcrop of the vein or lode and 300 ft. on each side, that a centre line parallel to the length of the claim and dividing it into two equal parts should correspond with the outcrop of the vein or lode, but as this is rarely if ever possible, the centre line or presumed 'middle of the vein at surface' is and will be considered as a theoretical lode line. The size and shape of lode claims may be said to be contained in the following: (1) the lode or centre line may not be more than 1500 ft. in length; (2) side lines may not be more than 300 ft. distant at right angles from the lode line or its prolongation. Adherence to these two rules makes 20.66 acres the maximum area of a claim. The side lines need not be parallel, but it is preferable to have them so. End lines should be straight, parallel to

each other, and have substantial existence. Lode lines should not be arbitrarily irregular or zigzag.

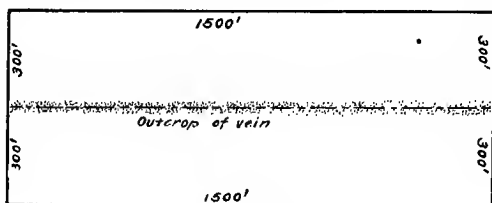


Fig. 4

Fig. 4 is an ideally laid out claim, being a perfect rectangle with side lines 1500 ft. long and end lines 600 ft. in length, and appropriating 1500 ft. in length along the outcrop of the vein and 300 ft. on each side, as contemplated by the law.

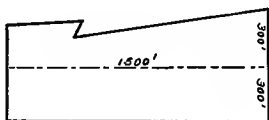


Fig. 5

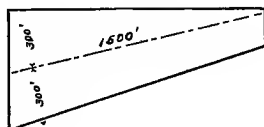


Fig. 6

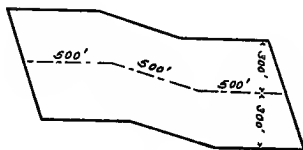


Fig. 7

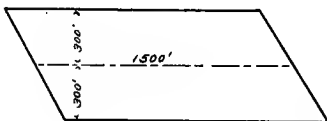


Fig. 8

Fig. 5, 6, 7, and 8 represent valid locations, as they do not claim more than 1500 ft. along the lode line, nor over 300 ft. at right angles from the lode line or its prolongation; also, the

end lines are parallel. Fig. 9 presents an interesting problem, in that, while in conformity with the law, and claims of this shape have been patented, it may allow over 3000 ft. of a lode to be taken. The principle is still further stretched in Fig. 10.

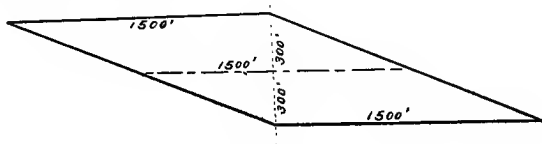


Fig. 9

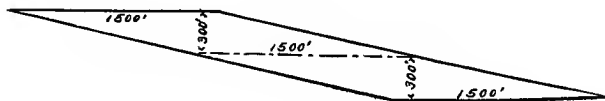


Fig. 10

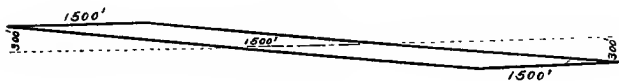


Fig. 11

It is said that claims of this shape have been patented. By still further stretching the point, as shown by Fig. 11, it would be possible to claim over a mile of a lode in one location. The question comes, where should this method cease? It would be a hardship to require that the end lines be at right angles to the lode line, but it seems desirable that the pushing of the claim out of a rectangular shape should cease with Fig. 9, where, if carried any further, a line at right angles through the lode line could not be made to touch or cut both side lines. Patent may possibly be allowed on claims shaped as in Fig. 10, but it is advisable to take no chances. Claims shaped as in Fig. 11, with the line or outcrop of the actual lode indeterminate, so that the locator could not be held to only 1500 ft. of

the actual lode, would undoubtedly be refused patent by the Land Department on grounds that such claims were against the intent of the Statute and good public policy.

Section 2320 of the Revised Statutes says, "the end lines of each claim shall be parallel to each other." The Land Department rigidly enforces the above rule when claims are surveyed for patent. The necessity of making the end lines parallel arises in the attempt to preserve the apex or extralateral right to follow the vein on its dip out of the bounding lines of the claim; such rights being limited by the Statutes to that part of the vein lying within the prolongation of the end lines on the surface when extended vertically downward toward the centre of the earth. Should these end lines converge toward or diverge from each other, the locator would, as depth was attained on the vein, obtain less (Fig. 12) or more (Fig. 13) than

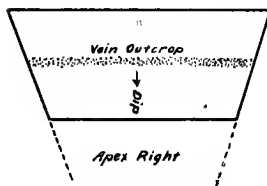


Fig. 12

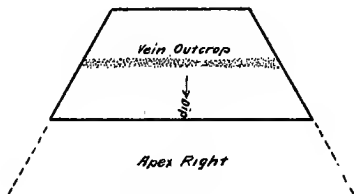


Fig. 13

his rightful portion. Consequently, if the end lines are not parallel, apex or extralateral rights are not allowed. This also explains the reason for making the end lines straight and unbroken, for were they otherwise the apex rights could not be determined. Where the vein passes into the claim and out through the side lines, instead of the end lines, the side lines become the end lines for extralateral right purposes. If these side lines are parallel, extralateral rights will be allowed. If not parallel, no such rights will be permitted. Consequently, the side lines should be made parallel, even though the law does not require it.

The Land Department has ruled that an end line a few inches

long will not be acceptable, but that end lines must have some substantial existence. Locations without parallel end lines, or where one of the end lines does not exist by reason of the claim being located in a triangular shape, are not valid; locators will be allowed to make amended locations to comply with the law. Patent has been refused upon claims surveyed in an irregular and zigzag shape, on the ground that it was an attempt to suit the convenience and desires of the locator, and not in comport with good public policy or the rights of others. In general, lode claims should be laid out in the shape of a parallelogram, preferably a rectangle claiming the maximum length of 1500 ft. along the lode or centre line and 300 ft. on each side of it. Where the corner-posts cannot be placed on unlocated or unclaimed public domain, they may be placed upon the ground of other claims or other entries than for mineral, whether patented or unpatented. Corner stakes may be placed upon the ground of others for the purpose of making the end lines parallel and taking in all the unoccupied ground, but it is presumed that no more already occupied ground will be blanketed or embraced within the lines of the newer or junior claim than necessary. While no right is acquired in this way to ground already located or entered, it is customary to locate a full-size claim or one as large as can be made with propriety, that in case the claimant of the older or senior location should fail to do his assessment work and the claim thereby become forfeitable, the ground in conflict or overlap could be included within the junior claim. The decisions of the courts are conflicting as to whether a junior locator acquires the overlap as soon as the senior location becomes forfeitable through failure to do the annual or assessment work, or is abandoned. The better view, and the one last announced by the U. S. Supreme Court, is that, as the junior location when made did not include the overlap, it can only include it by an amended location made for that purpose, after the overlap is open to location, and that, if such an amended location is not made, the senior locator may resume work, or other parties may relocate the senior claim including the overlap. When patent is being obtained for a claim, the applicant gets all the ground within his lines which

has not already been formally filed upon, entered, or patented, which is not specifically rejected in his application, or for which adverse proceedings have not been commenced and carried to a successful culmination by other claimants; consequently, the location of a junior claim applying for patent will take the overlap with a senior unpatented location, unless the senior location adversely affects the application for patent of the junior location to the extent of the conflict.

The proper way to locate a fraction of a claim is to make a location based upon a mineral discovery on the fraction or ground to be actually claimed, and then lay out a claim as if on unoccupied public domain, if it can be peaceably done; such a claim to be sufficiently large to embrace all of the fraction or fractions, since segregated pieces of ground may be included within the boundaries of one claim. The discovery shaft and location stake must be upon the ground actually claimed, the same as the mineral discovery. It is immaterial at what point on the lode or centre line the discovery or location stake is placed, it may be at either end or farther within the claim. The mineral discovery and discovery shaft or work need not be on the lode or centre line or at the location stake. They may be anywhere within the claim, except where State statutes may attempt to require them to be at the location or discovery stake.

While the law clearly contemplated making locations of a rectangular shape, taking in not more than 1500 ft. in length of a vein and 300 ft. on each side, and that the locator would confine himself to a few locations along well defined veins, this was based on the ideas of former days when the lode was the main object; in the actual practice today, giving surface area the most importance, locations are quite often made in groups, aiming to take in a certain area of ground supposed to be mineralized. As far as practicable, the mineral discovery should be upon the centre or lode line of the claim; this centre or lode line should also closely correspond with the actual outcrop of the vein or lode, when possible. A few court decisions are to the effect that a lode location cannot claim more than 300 ft. on each side of the middle of the vein at the surface,

as the Statute reads, and that consequently all ground more than 300 ft. from the vein outcrop is excess area to be deducted from the location. In one case where the vein crossed both side lines, it was held that the side lines became the end lines and that the location was invalid beyond 300 ft. on each side of the vein at the surface. This conception is against almost every idea and condition that prevails in mining today, and its enforcement would be productive of endless harm and confusion; the courts do not generally hold to it. The miner now asks, shall he, in locating a group to take up a certain area of ground, locate the claims so that the centre or lode line of each claim corresponds with a supposed vein outcrop and contains a mineral discovery, no matter how heterogeneously and conflictingly the claims lie or how inordinate in number they are; or shall he block them out regularly, even though all the centre or lode lines do not correspond with vein outcrops and there is not a mineral discovery on every centre or lode line? It would appear that the claim on the principal mineralization, the claim that is the nucleus of the group, or a single claim, had best be located according to the theory of the Statute when possible, but that the other claims should be blocked out regularly; at least, that is the manner in which it is invariably done in practice. After patent the question of having the lode or centre line correspond to the vein outcrop cannot be raised.

Having decided upon the ground which he wishes to hold, the miner should next determine how he can locate it to the best advantage. This means how he can cover the most valuable ground with the least number of locations, so that he need not do an inordinate amount of assessment work yearly; how he shall place them so that his assessment work done at an advantageous place or on a good-looking vein or mineralization may tend to benefit all the claims according to the requirements of assessment work, and later to benefit them for patent purposes; how he can manage to have a mineral discovery on each claim sufficient to prevent being dispossessed on that score; and how he can obtain the most advantageous extralateral rights. In this determination the miner can only be guided by his

familiarity with the laws and regulations, and the specific conditions under which he finds himself.

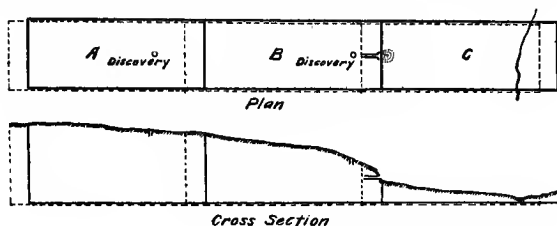


Fig. 14

Fig. 14 is a concrete illustration of a condition that often arises. The miner, having found a lode at the point marked 'Discovery' on *B*, locates three claims along it. On *A* he uncovers the lode by a little digging, and validates that claim. *B* is validated by its discovery, but *C*, being low down on the creek and covered with deep soil, has no discovery. To develop his lode, the miner starts a tunnel on the extreme end of *B* as shown, and within a short distance cuts the vein. The work done in the tunnel probably might not be allowed as assessment work on *C* if questioned in court, and certainly would not be accepted for patent purposes on *C*, as it does not tend to develop that claim. Consequently the miner would have to spend \$500 upon the ground of *C* before it could be patented. By pushing the claims ahead 150 feet, as shown by the dotted lines, the tunnel would be started upon *C* and a mineral discovery made to validate that claim, while \$500 worth of the tunnel would be on *C* and sufficient to patent it.

"The location must be distinctly marked on the ground so that its boundaries can be readily traced" (R. S., sec. 2324). This is mandatory and a most important thing—as important as a mineral discovery, and usually more so. For marking the location upon the ground, stakes or monuments should be placed, besides at the discovery or location point, at each corner and angle of the claim. Most locators place stakes at the centre of each end line. Alaska, New Mexico, Utah, and California

have no statutes on special staking, consequently stakes at the corners and angles are sufficient. Washington requires a monument placed at 'each corner.' The Montana statute states specifically that angles in addition to corners shall be staked, while the Idaho statute says that "any angle in the side lines" must be staked in addition to corners. Colorado, Nevada, and Wyoming require centre side-line stakes in addition to corners. Arizona and Oregon require centre end-line stakes as well as corners. North Dakota and South Dakota require corners, centre side-line stakes, and one at each end of the lode. The usual method of staking or monumenting is to use stakes, preferably similar to patent stakes by being three or four inches square, dressed, and projecting three feet or more from the ground. Usually they are undressed posts cut from saplings and placed in a mound of earth and rock. Well blazed trees or squared sapling stumps are good. Mounds of stone are also good, or a single large boulder may be marked to indicate that it is a corner. The statutes of each State should be consulted for their requirements. The best monument consists of a pile of stone, carefully laid up, earth being placed in the base to better hold the rocks in position, while in the centre is placed a post three or four inches square or in diameter, and five or six feet long. Each post should be blazed on a side facing the centre of the claim and have written thereon by a hard lead-pencil or keel, or have cut into it, the name of the claim and the position and number of the corner, as 'Exchequer Lode Claim—South-east Corner—Post No. 2.' The monuments of previous and forfeiting locators may be adopted. The stakes of adjoining locators may perhaps be employed by inscribing on the proper side, but it is always best to insert a new stake in the pile of rock, or in the absence of stakes to raise a new pile of rock as near the other rock monument as possible. Where a post cannot be set on account of inaccessibility or liability of removal, a witness corner should be established on the line as near the proper point as possible. Without doubt a witness corner placed because the locator was forcibly prevented from placing his corner on already claimed ground in his effort to get parallel end lines, is sufficient when, in connection with the description

in the location notice, it gives a clear understanding of the position of the claim and the boundaries. Marking the lines by blazes or brush-cutting is excellent.

When possible, it is well to tie in the corners by reference in bearing and distance to some prominent object, monument, or the corner of another claim. Certainly at least one such tie should be made. To tie the claim to a section corner or other land survey monument or a stake of a patented claim, is especially good; but outside of the knowledge of the exact location of the claim, there is no greater benefit than a tie to any permanent object. The whole purpose in marking claims and tying them to permanent objects is that a person may go upon the ground, find the claim, and trace the boundaries. This is the question to be determined when insufficiency of markings is being litigated in the courts. The monuments and markings in the field will control over the stated courses and distances in the location notice when the two disagree. When the locator has once placed his corners, he has satisfied the requirements; he has at that time carved out and appropriated a part of the public domain, to which he is entitled as long as his possessory right holds good, whether the corners remain and are kept up, or whether they disappear through the passing of time or the agency of others. It can readily be understood that the corners should be kept up to warn away other locators; also, the deputy mineral surveyor, when surveying the claim for patent, is required to know that he is keeping within the boundaries of the location by finding the corners or obtaining good proof of where they existed.

In staking a claim the miner does not always traverse or run the boundaries of his claim. An excellent method, when staking without a surveyor, is to start from the discovery monument and pace along the lode line the desired distance, guided by a compass, if one is available, to the point where the centre end-line stake is to be erected. Then from the centre end-line stake pace off and place the corner stakes of that end line, returning thence to the discovery monument and repeating in the other direction, running the dotted lines as shown in Fig. 15.

Alaska, California, New Mexico, and Utah have no statutes on

the time allowed to stake and mark boundaries, and it would appear that the claim should be staked at once. The statutes of Colorado, North Dakota, South Dakota, and Wyoming state that the boundaries shall be marked before "filing location certificate," the time for this filing being ninety days from date of location in Colorado and sixty days from such date in the three remaining States; consequently, that length of time is impliedly allowed for marking the boundaries. Idaho allows ten days to stake, Nevada allows twenty days, Montana and Oregon allow thirty days, while Arizona and Washington give ninety days. It is immaterial if the staking is not completed within the statutory time, provided an adverse location is not made by others before the staking is finished.

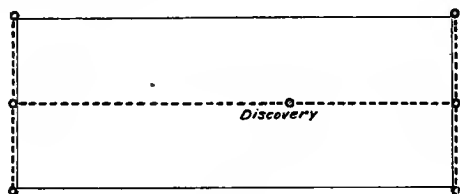


Fig. 15

A claim larger than that allowed by the Statute is not void, except in case of fraud or a mistake of the grossest kind that presumes fraud. Where the purpose was to make the claim of the statutory size and the error occurred inadvertently, the claim is only invalid to the extent of the excess. In the case of a location notice calling for a stated number of feet in each direction from the discovery or location stake, the bounds of the valid claim can easily be determined by measuring off the required distances in both directions along the lode line, and undoubtedly the locator can be held to his description, though in the absence of protests and adverse claimants he can elect where the excess shall be deducted. Where the claim is not laid out from a specified point, the locator will have the right in all ordinary cases to say from which part of the claim the excess may be deducted.

CHAPTER IX

Lode Location—Changing Boundaries, Amended Location, Relocation

A locator may change his boundaries or the name of his claim at any time, provided he does not interfere with existing rights. He may even swing his claim at right angles. However, he should hold substantially to the same ground as before, and if possible use the same discovery or location point. While it is clear that the rights of others shall not be interfered with in changing boundaries, it is not certain what would be the result where a claim-owner, having done the amount of work required for patent purposes upon his claim, should swing part of his claim over upon the valuable locations of others and immediately ask for patent, while the senior locators of the ground now in conflict would fail to adverse through presuming that the claim up for patent was still occupying its original position, but would afterward discover their loss. The only redress that appears would be to attempt to take the matter into court asking that the patent owner be declared to hold the conflict area in trust to be conveyed to the defrauded locators.

An amended location notice, not a relocation, should always be placed upon the ground and recorded, when changing boundaries in any way. The difference between an amended location and a relocation should be fully understood. An amended location is made for the purpose of preserving all the desired rights and privileges obtained by the original location, and any new desired rights that can be lawfully obtained by amending the original location. A relocation is a new location of the ground of a former and abandoned or forfeited location. If the location is made by the owner of the former location, it is technically a waiver of all rights under the previous location. Still, the exact rights under a relocation by the original locator or owner

are indeterminate, for both miners and courts hold that it has some relation back to the original location, the strength of the relation depending mainly upon whether any adverse claimant or intervening location has come between the two locations.

By making a relocation instead of an amended location, the value of any previous work is lost for patent purposes, possibly excepting where it can be shown that the relocation is virtually an amended location. Where a discovery shaft is required to be sunk following the location, a relocation will require such work to be done, whereas an amended location does not. The amended location notice need not differ materially from the original location notice, with the exception that it should state clearly that it is an amending of the notice and preferably specifying the particular changes. Such information may be contained in the following, inserted as the final paragraph of the notice:

This is an amended location made for the purpose of adjusting the boundaries of the claim, etc. It is based on the original location made, dating all rights from the original location and waiving none obtained by it and consistent with the present amended location.

Amended locations are made for the following purposes: (1) To relinquish or acquire contiguous ground; (2) to relinquish any excess area or take in the maximum area; (3) to acquire the overlap of a prior or senior location now open to acquisition through abandonment or failure to perform the annual labor; (4) to make the courses and distances more exact or the lines parallel; (5) to change the name of the claim; (6) to cure minor defects in the location; (7) to add the names of new locators. Dropping the names of old locators by an amended notice or a relocation is unsafe. The relinquishment of each name should be secured. An amended location may be treated as an original location, but it cannot be used to acquire title where the original location was void for some basic reason. For instance, a location invalid because made on ground lawfully held by prior locators, cannot be perfected by an amended location made after the prior locators have abandoned the ground or

allowed it to become forfeitable. In this case a new location, a relocation—since it is of a claim located before—instead of an amended location, must be made after the claim is open to location; for a location to be good, must be good or have the elements of being good when made. So also, amending cannot date rights back to the original to cut out the intervening rights of others lawfully acquired between the original and the amending location. But where a valid location has been made upon a small area of ground, the location may be amended to take in a large area of abandoned or forfeitable ground; or a claim having the basic elements of a valid location and good faith, may be amended to correct technical and other minor errors. Properly, a former and forfeiting locator should have no right to locate a claim that he is liable to lose through his failure to perform the annual labor, since by repeated relocating he is able to hold ground indefinitely without doing any development or exploration work upon it, unless the State statutes require discovery work. Section 2324 of the Revised Statutes says that if the annual labor is not performed upon the claim, as required by law, it "shall be open to relocation in the same manner as if no location of the same had ever been made; provided, that the original locators, their heirs, assigns, or legal representatives have not resumed work upon the claim after failure and before such location." If the original locator or owner relocates a claim and afterward goes to work upon it before other and adverse locations are made, he, without doubt, by resuming work, overcomes any illegality of his relocation and perfects his title. But the status of the ground and his rights when he merely makes a relocation and before doing any work under the relocation, is doubtful. The Supreme Court of Utah held that the Statute did not authorize discriminating between an original and a new locator, and consequently that a man could relocate his ground that was forfeitable through failure to do the annual labor, just as a new locator. The question as to whether a man may safely relocate his own claims has not been sufficiently passed upon by the courts to permit an authoritative answer. The opinion is that while such relocations may be voidable, they are not void. Most miners severely

condemn such locations, but generally do not try to overthrow them.

The mining statutes of California state that the failure or neglect of any locator of a mining claim to perform development work of the character, in the manner, and within the time required by the laws of the United States, shall disqualify such locators from relocating the ground embraced in the original location or mining claim or any part thereof under the mining laws, within three years after the date of the original location, and any attempted location thereof by any of the original locators shall render such location void.

CHAPTER X

Lode Location—Annual Labor

R. S., Sec. 2324: * * * On each claim located after May 10, 1872, and until a patent has been issued therefor, not less than \$100 worth of labor shall be performed or improvements made during each year. * * *

ACT OF CONGRESS: * * * The period within which the work required to be done annually on all unpatented mineral claims, shall commence on the first day of January succeeding the date of location of such claims. * * *

The 'annual', 'representation', or 'assessment' work required by the above Statutes is one of the principles of the common law of mining wherever found. It was originated by the miner that each occupant of mineral ground might show his good faith by doing something toward developing the ground, instead of holding large areas without exploration. Its wisdom has remained unquestioned through all the ebb and flow of criticisms and proposed changes of the mining law. State statutes or district rules may require more than \$100 worth of work, but they cannot fix the amount at less. The first annual labor must be performed in the calendar year following the calendar year in which the location was made. Thus a claim located at 1 a.m. in the morning of January 1, 1910, needs no annual labor during 1910, but does require \$100 worth of work during 1911. If a claim be located in December 1910 and discovery work valued at \$100 is commenced and completed in 1911, the discovery work answers for the necessary annual labor for 1911.

The work may be performed upon the ground of the claim. It may be performed off the claim, but upon a group of which the claim in question is an allied member, or it may be performed upon ground away from the claim and not included in the group. In the first case, the wisdom or expediency of the improvement

cannot be questioned in court. In the latter two cases, the claim-owner may be called upon to show that the work or improvement was made in good faith and purposes to develop the claim in question. Whether the work does or does not tend to develop and benefit the claim, is a question of fact to be decided by the jury. Such work as roads, trails, and cabins will usually benefit all the claims. An improvement will benefit a distant claim, if it can be shown that the improvement is part of a rational development plan, which, when extended, will open up and develop the ground of the distant claim. Where a single or common improvement is being made for several claims, there is no specific requirement that the claims be contiguous, but, as in the case of an improvement made for a claim or group, the work must aim to develop each claim. The different owners of separate groups may unite without merging their ownerships, to perform their annual labor in a common improvement which will jointly develop and be of use for the several groups.

The nature of the work can best be expressed by stating that it should directly or indirectly tend to develop the mineral contents of the ground and facilitate its extraction therefrom. Annual labor and work for patent purposes have been held to be similar, but there is a difference between them in extreme cases, because a liberal construction has been placed upon what may constitute annual labor, while the lines have been drawn tighter by the Land Department in what may answer for patent work. What is, or is not, assessment work, must be interpreted from the decisions of the courts when such work has been called into question. Excavations made in attempting to open up and extract mineral are the best kind of annual labor. Excavations of some size, such as cuts and pits made in prospecting, are good, but when these are reduced in size to the holes dug by the prospector as he follows the float or colors up a hillside to a ledge or vein, they are not applicable. Apparently, works of a permanent nature that leave some trace of themselves, and especially that tend to directly improve the claim, are required. Wagon-roads and trails are applicable, where they are actually necessary for the working of the claims. They may be either on the claims or in the close vicinity. To make a building

erected on a mining claim applicable for annual labor, it must have been placed there for the purpose of benefiting the claim and for the improvement of the claim. An ore-house built on a claim for the benefit of an adjoining claim was rejected as annual labor for the claim upon which it stood. A house built at a point 200 feet from the claim and subsequently removed, was rejected, mainly because of the house having been removed.

The following has been rejected as annual labor: Work done upon a claim that was not of a mining character and was intended for other purposes; the expenditure of time and money traveling about regarding matters connected with the mining claim; the cost of reaching the claim; the sampling and testing of rock; the hauling of material and supplies; the felling of timber not used; the purchase of mining supplies which were not used; the cost of groceries and household utensils. The cost of tools purchased cannot be allowed, since they do not become a part of the claim, but a proper charge for their use or part use is correct. Likewise, the cost of hauling material and supplies used, and the cost of groceries, may be indirectly included in the annual labor when the extent to which they benefit the claim is determined in the proper way. The wages paid or allowed to a watchman whose services are necessary to keep the tunnels and drifts open, buildings in repair and from being burnt down, machinery from ruin, or ore from being stolen where same would cave and destroy the workings of the mine, are allowable where it is desired to keep the property in repair to resume operations later. The wages paid a watchman are allowable in those cases where the services of a watchman will keep the improvements intact and from deterioration on the same basis as money expended to create them anew. But the wages of a watchman looking after a naked claim, or there to warn away prospectors, or where it cannot be shown that a watchman is needed, will not be allowed.

The miner who is actually trying in good faith to develop the mineral resources of his ground is not liable to have his work questioned. It is the one who is not trying to develop his ground, but is frittering away the time he spends on his claims and is relying on the supposed technicalities of the

law or the well known popular aversion to trying to prove that a man has not done his annual labor, that is liable to have his ground adversely located.

Annual labor is valued by what it is reasonably worth. If the work is reasonably worth \$100, the fact that it was performed at a less cost is not derogatory. Whether the work has been paid for or not is immaterial, just so it has been performed. The work may be done by anyone interested in the claim, or may be contributed by outside parties. When the annual labor for a group is performed all upon one claim, it is presumed that the work benefits that claim first and the other claims in the order of their relation to the first claim or relative benefit by the work. Thus, should the work be questioned in court and found insufficient to benefit all the claims, it would be held that those claims most directly benefited should take credit in the order of the benefit received until the allowance was exhausted, thus rendering the more remotely benefited claims forfeitable. The fact that \$500 worth of improvements have been made upon the claim gives no reason for not performing the annual labor.

Annual Labor Pending Patent Proceedings*

The process of patenting or obtaining the fee title to mining claims held by location or possessory right may be divided into three steps or stages. (1) The application to the surveyor-general of the land district for an official patent survey, followed by the field work of the deputy mineral surveyor, and it in turn by the checking and the approval of the survey by the surveyor-general and his official filing of the notes and plat. (2) The filing of the approved survey with the local land office, together with the application for mineral patent to the land embraced in the survey, followed by all the various proceedings, including opportunity to file adverse claims, as required by the Land Department in its efforts to see that the laws are complied with and the rights of other miners are protected. (3) The entry for patent by paying the purchase price for the land at

*From *Mining and Scientific Press*, May 28, 1910.

the local land office and receiving therefor the receiver's certificate or receipt, to be exchanged for the patent upon its issuance.

By the first step the applicant acquires no further right to the ground, beyond that contained in his possessory right, than such additional constructive right as the better marking of his claim and the official filing of its exact position and boundaries may give. There is also the further safety given by the officially marked posts, which will lead many to believe that the claims are patented. No compulsion upon the claimant exists to proceed further toward patent.

Prominent in the second step is the filing of adverse claims against the proposed patent by those who claim the ground or portions of it by other and adverse locations to the one entered for patent. Adverse claims must be filed at the local land office during the sixty days of publication of the notice of application for patent. They may be fought out in the courts later. Also prominent in the second step is any protest made by the employees of the Government or by private parties against granting patent on the ground that the Federal Statutes and the regulations of the General Land Office have not been complied with. The protest may be initiated at any time after application for patent and up to its issuance, to be fought out before the register and receiver of the local land office. After the adverse suits and pending protests have been disposed of and the local land office is able to ascertain what ground the applicant is entitled to under the law, he is allowed to take the last step of making final entry and receiving the receiver's receipt in temporary lieu of the patent document which will arrive later from Washington.

The status of the claim with reference to performance of annual labor or assessment work during the second and third steps—the steps for obtaining patent proper—is not entirely clear. The Statute says, "on each claim located * * * and until a patent has been issued therefor, not less than \$100 worth of labor shall be performed or improvements made during each year." The courts have recognized that there is great delay in issuing the patent document, which is largely a clerical matter, and conse-

quently have held that when issued, its rights date from the time of making final entry by paying the purchase price for the land and receiving the receiver's receipt and the final-entry certificate. Consequently it appears, and the decisions are to the effect, that a relocation of a claim cannot be made because of the failure to perform annual labor after date of final entry, and that making final entry relieves the applicant of performing annual labor, provided the patent document is eventually issued. But if the receiver's receipt is cancelled on grounds of fraud and patent therefor does not issue, the claim is in the position of never having made a final entry and consequently is subject, and has been subject at any time, to any relocation that could be made for non-performance of annual labor, just as a location not going through the patenting process. In a case where the applicant was not guilty of fraud, but the final entry was cancelled because of an insufficient publication of the notice of application for patent which did not reflect upon the honesty and good faith of the applicant, and he was required to begin publication anew, the court held that the applicant had a right to rely on his final entry and the expected issuance of the patent document to excuse him from performing the annual labor. This is the right view, but it is not certain that the courts will always hold to it. It seems fairly certain that the honest applicant need not perform any annual labor after final entry for patent, and that is the way patent applicants usually proceed, but full surety is found only in carrying on annual labor to date of issuing the patent document.

In this connection it is necessary to consider the position of the Land Department and the time when entry may be made. The Land Department has recognized that final entry cannot always be made immediately after the expiration of the period of publication of application for patent, since adverse suits and protests often drag out for a few years; but until these are settled, it cannot allow final entry, for it does not know what ground, if any, the applicant is entitled to patent. When final entry becomes allowable through the expiration of the publication period if there are no adverse or protests pending, or through the termination of adverse suits in court or protest proceedings

in the Land Department, it allows to the end of the then current calendar year to make entry, whether the time be only a day or several months. Thus if the publication period and any adverse suits or protests end January 30 or December 30, the applicant should make final entry on or before December 31. If he delays into the next year, he does so at the peril of losing all rights gained under the patent application. If the delay is trivial, he may only be required to show that no relocation of the claim was made. If the delay is material, he may have his application cancelled and be required to begin application anew.

After the expiration of the year in which final entry should be made, but is not, the Land Department will receive a protest against the entry being allowed upon the ground that the claim is now the possession of another through relocation for non-performance of the annual labor for the previous year; the protest being made with a view to cancelling the application or final entry so that a new application and publication will be required, allowing the protestant a chance to adverse and litigate his rights in court. Where the protesting relocater cannot get his protest accepted by the Land Department, he can yet attempt to get the courts to declare the patent applicant a trustee of the claim to convey it to him.

It would appear unjust to require the patent applicant who intends to make final entry within the calendar year allowable, to continue annual labor during the years that adverse suits and protests may drag out, and there is a slight, though very slight, possibility that the courts may protect him in case he has not performed this work, though the courts are limited by the Statute reading "until a patent therefor has issued." The unjustness of the principle may be illustrated in this way. For various reasons nearly all applications for patent are made in the latter part of the year, and the period between the end of publication and the close of the then current calendar year is often only a few days, while in the majority of cases the annual labor for the year has not been done or an insufficient amount has been performed; reliance being placed on final entry to be made that year. It would be easy for one hostile to the patent applicant to file an adverse or a protest so that the applicant

could not make entry that year. As a result the applicant would have to commence work on the claims—where no annual labor or an insufficient amount had been performed that year—in the heart of the winter, often an almost impossible thing, to prevent them from being validly located after the first of the year by the hostile or other party.

Proof of Labor

The statutes of most States have arranged for the filing of a 'Proof of Labor' with the county recorders and local mining district recorders where the claim is situated. This is the affidavit of the claim-owner, his agent, the person who has performed the work, or other interested party cognizant of the facts, stating that the annual labor has been performed upon the claim or claims as required by law. The making and filing of this is directory only, not mandatory. It is *prima facie* evidence that the work has been done, and throws the burden of proof upon one asserting that it has not been performed; whereas failure to file the affidavit is considered to throw the burden of proving the work was performed upon the claim-owner, but does not in any way throw the claim open to relocation by others.

The period in which to file varies with the States. North Dakota, South Dakota, and Oregon have no 'Proof of Labor' statutes. Montana allows twenty days after completion of work within which to file. Utah allows thirty days after work is performed. Wyoming and Nevada allow sixty days after completion. California and Washington allow thirty days after the annual labor period. Arizona allows three months and Colorado six months after the annual labor period. Idaho and New Mexico allow sixty days after the annual labor period. The Federal Statutes or regulations make no reference in any way to 'Proofs of Labor,' outside of allowing ninety days after close of year to file 'Proof of Labor' in Alaska.

A single affidavit is usually filed for a group of claims, instead of an affidavit for each claim. A complete 'Proof of Labor' affidavit should contain: Name of claim or claims and their location; dates between which the labor was performed; where labor was performed; description, amount, and value of the labor;

purpose of the labor; by whom performed; for whom performed and at whose expense. These are contained in the following form, to which some States would require the actual amount paid and by whom paid.

PROOF OF LABOR AFFIDAVIT

STATE OF UTAH, }
County of Salt Lake. } ss.

James Grant, of Salt Lake City, being first duly sworn, deposes and says:

That he, together with Wm. Fitzgerald and Bernard Stevens, performed the annual labor for the year 1910 upon the Fulton, Dolly Dimple, and King Pin lode claims in the Snake Creek Mining District, Summit County, Utah.

That said labor consisted of ninety days work between August 10, 1910, and October 1, 1910, together with powder and other necessary mining supplies to the amount of over \$30.

That said labor was performed in a tunnel on the south end of the Dolly Dimple claim, in extending said tunnel 30 ft. from a point 100 ft. from portal to point 130 ft. from portal, thereby removing over 720 cubic feet of solid rock.

That said labor was performed for and at the expense of the Golden Cross Mining Co., and at the request of its president, Bartley McDonough.

(Signed) JAMES GRANT.

Sworn and subscribed to before me this eighteenth day of October, 1910.

GEORGE L. PARKS,
Notary Public.

CHAPTER XI

Lode Location—Resumption of Work, Forfeiture, Abandonment

R. S., Sec. 2324: * * * Upon a failure to comply with these conditions [the requirement of annual labor], the claim or mine upon which such failure occurred, shall be open to relocation in the same manner as if no location of the same had ever been made; provided, that the original locators, their heirs, assigns, or legal representatives, have not resumed work upon the claim after failure and before such location. * * *

By failing to do his annual labor, the claim-owner does not lose or forfeit his claim; it only becomes forfeitable by him and locatable by others. It is only when it has been appropriated by another through a new location—a relocation—that it is lost and forfeited by the old owner. Up to the time of relocation, the old owner may, by resuming work upon the claim, redeem his claim from being forfeitable, as provided by the above Statute. Even after relocation has begun, and while the various acts of location prescribed by Federal and State statutes are being completed within the allotted time, the old locator may resume work at any time before the completion of all the acts of relocation, and thereby render the attempted relocation void, except in Montana, where a forfeiting claimant cannot resume work after a relocater has posted his notice.

The resumption may take place at any time, perhaps years after any previous work has been performed, but presumes that there has been no abandonment of the claim nor any intervening location. By resuming work, the miner dates his rights back to his location, except where he had abandoned the claim, or where there has been an intervening location which has become forfeitable through failure to do the annual labor. The

status of the claim after resumption under these exceptions is not clear. While, of course, the claim can be patented if no question is raised, the better view, especially in the case of where there has been an intervening relocation by others, is that a resumption will not date the rights back beyond the intervening location or abandonment, and that in consequence a new location should be made.

The principle of resuming work at or just before the moment a claim becomes forfeitable is used to save a claim from relocation by others. As the annual labor preserves the possessory right by calendar years, it follows that if the work is not performed during any year (following the year location is made), the claim becomes forfeitable at and after 12 o'clock midnight of December 31 of that year. If the miner, who has failed to do his annual labor, arrives on the claim on December 31 or before, and begins work which he prosecutes during the usual work hours, returning on the following morning of January 1 and continuing work with due diligence until \$100 worth of work has been performed during the new year, he has made such a resumption of work as will render void any attempted location after midnight of December 31, or throughout the new year. It is not necessary to do \$100 worth of work for the old year and another such amount for the new one. The resumption of work coupled with the possession of the claim, has taken care of the old year, while the doing of \$100 worth of work during the new year constitutes the annual labor for that year. If the miner arrives at his claim at 11 p.m. on December 31, begins work before midnight which he continues into the next day and thereafter with due diligence, he has kept his claim from becoming forfeitable. Just what is due diligence cannot be defined; the resumption should be substantial and fairly promptly performed, until it amounts to \$100 per claim. The resumption of work followed by the performance of a satisfactory amount of work, validates the claim to date, so far as the annual expenditure is required, no matter how many of the previous years were without work. Whether a claim is forfeitable on account of non-performance of annual labor, depends on one question only, was the labor for the previous year

done? If it was performed, then the fact that it was not done in years prior to that year, has no weight whatever.

An important question arises in the case of a newer or junior location overlapping an older or senior location, as illustrated by Fig. 16. If the holder of the senior location fails to perform

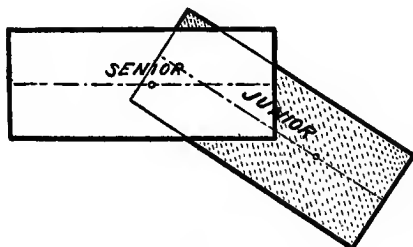


Fig. 16

his annual labor, does the overlap or area in conflict at once become part of the junior location, or in case the owner of the junior location does not make an amended location to take in the overlap, can the senior, by resuming work, retain the overlap, or can a relocation of the senior claim by others hold that overlap? The decisions are conflicting, but it would appear, following the principle that a location, to be valid, must be valid when made, and that a valid location definitely carves out and sets aside a piece of ground, that the senior claim would remain intact as located, until some part of it was specifically and validly appropriated, while the junior claim would contain nothing but what it appropriated when first made, except a new and additional appropriation be made, which would require an amended location.

Forfeiture and abandonment are not the same. In the case of forfeiture, the forfeiting owner has simply failed to comply with the law, and in consequence loses the claim upon its relocation by others. But in the case of abandonment, the miner gives up all his rights and privileges incident to the claim, intending to have nothing more to do with it, and allowing it

to become public domain again. Abandonment may be made in two ways, by a verbal or written statement, or by leaving the claim with the intention of not returning and putting no more work or care upon it. In the first case, relocation may be made at once by a second party, even if the abandoning owner had performed the annual labor for that year. In the second case it is practically impossible to prove the intent to abandon, consequently relocation should only be made when the claim becomes forfeitable, for the old owner might return and attempt to claim the ground at any time up to that point. It has been said that a forfeiture cannot be established, except upon clear and convincing proof of the failure of the former owner to have work performed or improvements made to the amount required by law. To establish abandonment, likewise requires positive proof of the intention to abandon. The burden of proof is upon the party alleging forfeiture or abandonment.

A relocation of an abandoned claim by one of the abandoning co-owners is valid; but an abandonment and relocation to avoid doing the annual labor, is invalid. Where a co-owner relocates a forfeitable claim for himself, and hostile to the other co-owners, he holds the claim as a trustee for all the owners; in other words, he cannot 'locate his partners out.' An agent or employee cannot betray his trust and make a relocation of a claim he is empowered to care for. Also, where a claim-owner employs a second party to do the annual labor, and the second party, unknown to the claim-owner, fails to perform the annual labor, apparently the claim does not become open to relocation, especially where the owner upon learning that the work was not performed, immediately proceeds to do it; the courts have given varying opinions on this subject.

Forfeiture by Co-owners

R. S., Sec. 2324: * * * Upon the failure of any one of several co-owners to contribute his proportion of the expenditures required hereby [the annual labor], the co-owners who have performed the labor or made the improvements, may, at the expiration of the year, give such delinquent co-owner personal notice in writing or notice by publication in the newspaper published nearest

the claim for at least once a week for ninety days, and if at the expiration of ninety days after such notice in writing or by publication, such delinquent should fail or refuse to contribute his proportion of the expenditure required by this section, his interest in the claim shall become the property of his co-owners who have made the required expenditures.

In 'advertising out' a co-owner, the demand can only be made for the co-owner's share of the work at the rate of \$100 per claim. If more than \$100 per claim was spent, the co-owner's refusal to contribute on a basis of more than \$100 cannot be used, under the Statute, to work a forfeiture of his rights in the claim. It appears that if a certain co-owner or co-owners have the work performed, any forfeited ownerships will inure to them solely, instead of being also apportioned among the other co-owners who may subsequently offer to pay their share toward the forfeited portions. If the demand is made by personal notice in writing, the delinquent has ninety days within which to respond and pay his portion. If the demand is made by publication for ninety days in the newspaper published nearest the claim, as should always be done if the delinquent cannot be readily found or reached, the delinquent has ninety days from expiration of period of publication within which to respond.

FORFEITURE NOTICE

To Wm. Barnwell:

You are hereby notified that I have expended \$100 in labor and improvements upon the Copper Globe lode-mining claim in the West Mountain Mining District, Salt Lake county, Utah, in doing the annual labor required by law to be performed during the year 1910.

If, within ninety days from the personal notice, or if personal notice is not made upon you, then within ninety days after the period of publication thereof, you fail or refuse to contribute your proportion, which amounts to \$50, your interest in the claim will become the property of the subscriber, your co-worker, who has made the expenditure.

R. V. STEWART.

The notice of forfeiture should be recorded together with the proof of service and non-payment—the affidavit of the co-owner

making the expenditure to the effect that the notice of forfeiture was personally served and that payment was not made within the statutory time. If the notice of forfeiture has been given by publication, then instead of proof of service and non-payment, the affidavit of the publisher stating that the notice was published as required by law—the proof of publication—and the affidavit of non-payment made by the co-owner, should be filed.

CHAPTER XII

Millsite Location

R. S., 2337: Where non-mineral land, not contiguous to the vein or lode, is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such non-adjacent surface ground may be embraced and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable to veins or lodes; but no location hereafter made of such non-adjacent land, shall exceed five acres, and payment for the same must be made at the same rate as fixed by this chapter for the superficies of the lode. The owner of a quartz mill or reduction works, not owning a mine in connection therewith, may also receive a patent for his millsite, as provided in this section.

The above section provides for two kinds of millsites—millsites as appendages to mining claims for their better development and working, which may be used for any purpose incidental to the mining and reduction of ores, and millsites for mills and reduction works independent of mining claims, which must be used for sites for reducing ores.

The land must be non-mineral. Following the rule of the Land Department that the land should be put to its most useful purpose, this means that the land must be more valuable for the millsite purposes to which it has been put than for its mineral. As the value of an undeveloped mining claim is highly speculative, to say the least, it would be best, should the land contain mineral-bearing formations and a mineral discovery can be made—where it is essentially mineral in character—to locate it as a lode claim, even should the claim be wanted for millsite purposes and meet the test mentioned before. The Statute undoubtedly contemplates, and the Land Department must be

considered as preferring, that ground which may be deemed worthy of prospecting, shall be located, held, and patented under the lode or placer laws, and only ground which may not be deemed worthy of prospecting, that seems almost without question to have no possible mineral value, should be located under the millsite law, especially the first class of millsites. It appears that a millsite location, valid by reason of being made in good faith on ground having a nonmineral character—not known to be valuable for mineral at time location was made and perfected—cannot be cancelled or impaired by a subsequent discovery of mineral in nominal quantity, and by the placing of a conflicting lode or placer location, though it is not fully settled that a valuable mineral deposit discovered after millsite location cannot be located as lode or placer by others. After patent there can be no question but that all mineral which may be found belongs to the patentee. To defeat a millsite location, it would be necessary to show that the ground was known mineral land at time location was made and perfected; it might even be necessary to show that it was valuable mineral land. A millsite location cannot be defeated by a subsequent agricultural entry, nor can a millsite location defeat a prior and existing agricultural entry.

The Statute says that a millsite shall not be adjacent to the vein or lode. The Land Department has interpreted this as being an attempt to prevent the obtaining of further mineral ground under an improper location or entry, and has ruled that a millsite may be in contact with the side line of a claim if it is clearly not an appropriation of more mineral ground, that is, the millsite must be strictly non-mineral. A further application of this principle would allow locating and patenting millsites in contact with the end lines, where it can be conclusively shown that the millsite is non-mineral and that its entry should be allowed.

Since the Statute is silent regarding the method of locating millsites, it is customary to follow very much the same methods as in making a lode location. Millsites should be square or rectangular with a post at each corner. A single millsite cannot exceed five acres in area. Five acres equals a tract 466.7 ft. square, or 217,800 sq. ft. A location notice should be placed upon the

ground and also recorded. Millsites are usually named after the claim or group to which they are appended. When a claim or group including a millsite, is surveyed for patent, the same survey number is used for both, but the number on the lode locations is followed by A, as '4785 A', while the same number used on the millsite is followed by B, as '4785 B'. Letters are also used in patent surveys in some surveyor-general offices when lodes and placers are included in the same application. Millsites may be located at the time of location of their lode claim or claims, or at any time thereafter, even after patent. A single mining claim is entitled to a millsite location. A group of mining claims, according to the rulings of the Land Department, is entitled to as many millsite locations as it actually and reasonably needs, and no more. Consequently not more than one millsite location should be made in connection with a group of lode claims, unless the locator is able to show in subsequent entry for patent or adverse suits, that all of such claims are necessary.

No discovery work, annual labor, or patent work is required upon millsites. The possessory right to those of the first class is dependent upon the possessory right to the lode locations to which they are appended. If the required work is not performed upon the lode locations and they thereby become forfeitable, the millsite is also forfeitable. But while no development work or annual labor is required upon millsite locations of the first class, some use for mining or reduction purposes is requisite to their possession until patented. Such use may be the erection of a mill or other reduction works; the storing of ore; the pumping of water; the erection and use of a living cabin, a bunk-house, or shops; the dumping of water or banking of tailings or waste. Uses foreign to those incidental to mining or ore-reduction will not suffice. Under some conditions storage of water may be counted, but not under others. Millsites cannot be located for the timber upon them only, for uses disconnected entirely from the lode claim, to be turned over to another party, or to secure water-rights that are properly obtained under the laws of water-appropriation and protected by Sections 2339 and 2340 of the Revised Statutes, as wells, springs, dams, or reservoirs.

Millsites of the second class, those having no connection or association with a lode claim, cannot be patented unless each millsite has a mill or other reduction works upon it. Plants of another nature, even though of service to a mill or mine, or other uses of the claim, will not satisfy the law.

CHAPTER XIII

Placer Location

R. S., Sec. 2329. Claims usually called 'placers', including all forms of deposits, excepting veins of quartz, or other rock in place, shall be subject to entry and patent, under like circumstances and conditions, and upon similar proceedings, as are provided for vein or lode claims; but where the lands have been previously surveyed by the United States, the entry in its exterior limits shall conform to the legal subdivisions of the public lands.

R. S., Sec. 2330. Legal subdivisions of forty acres may be subdivided into ten-acre tracts; and two or more persons, or associations of persons, having contiguous [placer] claims of any size, although such claims may be less than ten acres each, may make joint entry thereof; but no location of a placer claim made after July 9, 1870, shall exceed 160 acres for any one person or association of persons, which location shall conform to the United States surveys. * * *

R. S., Sec. 2331. Where placer claims are upon surveyed lands, and conform to legal subdivisions, no further survey or plat shall be required, and all placer-mining claims located after May 10, 1872, shall conform as near as practicable with the United States system of public-land surveys, and the rectangular subdivisions of such surveys, and no such location shall include more than twenty acres for each individual claimant; but where placer claims cannot be conformed to legal subdivisions, survey and plat shall be made as on unsurveyed lands. * * *

As the lode location is the prevailing and most important type of mineral location, that subject has been treated at length. The laws, regulations, principles, and customs of placer location are substantially those of the lode location, except where the fundamental differences between the two types of deposits necessitate changes. Consequently, in this discussion of placer loca-

tions, only these differences and the points inherently connected with placers, need be dwelt upon. The three Statutes given above are the Federal laws governing placer locations of the usual type. Three other Statutes covering special deposits of mineral will be given later in their place. Placers require a discovery, staking, and the posting and recording of location notice. The location should preferably state for what mineral or minerals the location is made, though this is not required by law. Annual labor is required as with lodés, likewise the expenditure of \$500 before patenting. The price of the land when obtaining patent is \$2.50 per acre, as against \$5 in the case of lodes. State laws should be consulted regarding their particular requirements, some of which call for discovery or location work.

The first question is, what is a placer and what may be located under a placer location? A 'placer' originally meant a deposit of gravel, of pebbles, and boulders and soil, which had come to contain gold through the disintegration and washing down into the ravines of the veins or lodes which originally held the gold. This gold in the placer was free from its rock matrix and could be obtained as gold dust or nuggets by washing away the lighter gravel. The term placer as now used in connection with the mining law, covers deposits of a large number of minerals besides placer gold. These deposits subject to placer location are related to the occurrence of placer gold by being formed by the same agency, running waters upon the earth's surface, or by standing waters and a few other agencies producing deposits having physical structures similar to those formed by the surface waters.

Whether certain deposits should be treated as placers or as lodes has given much trouble in the past, and is not yet fully settled. At one time it was thought that metallic minerals should be located as lodes and nonmetallic minerals as placers. The metallic or nonmetallic character of the mineral has practically no bearing on the subject, except the fact that minerals of the first class usually occur as lodes and the second as placers. What may be located as placers is dependent upon the final interpretation by the courts of what is a placer as defined by the Statutes. This definition by the Statutes includes: (1) "Claims

usually called 'placers', including all forms of deposit, excepting veins of quartz, or other rock in place" (*R. S., Sec. 2329*); (2) "lands that are chiefly valuable for building stone" (*Act of Congress*); (3) "lands containing petroleum or other mineral oils, and chiefly valuable therefor" (*Act of Congress*); (4) "lands * * * containing salt springs, or deposits of salt in any form, and chiefly valuable therefor" (*Act of Congress*).

The first is the general definition of a placer; the other three are contained in special Acts made to enable the deposits to be taken up under placer laws. The first and general definition must be considered in connection with the statutory definition of what is a lode or 'subject to lode location, which reads "veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits." (*R. S., Sec. 2320*.) As placer includes all "excepting veins of quartz, or other rock in place", it must be inferred that lode locations may be made upon deposits described in two ways: (1) "veins or lodes of quartz"; (2) "rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits"

The following substances are held locatable under the placer laws when found in placer form; when occurring as veins or lodes, even if primarily formed as placers, it appears that they should be located as lodes. The last three are the subjects of special placer Acts.

Alum	Kaolin or fire clay
Amber	Limestone
Asphaltum	Marble
Borax	Mica
Building gravel (uncertain)	Phosphate (uncertain)
Building stone	Salt beds and springs
Gas	Slate
Gold-bearing gravel	Soda
Guano	Sulphur
Gypsum	Tailing and slag
Iron beds	Petroleum

The geologist would place under lodes, those deposits filling fissures or cracks in the earth's crust; deposits having no relation to stratification or bedding planes, except as these may form lines of weakness and openings for the passage of the mineral-

izing solutions and the deposition of mineral deposits formed by the circulation or movement of water beneath the surface of the ground, producing enrichment, vein formation, or general mineralization; these are subject to lode location, for they are lodes. Under placers he would place those deposits formed by the natural surface waters running over, standing, or evaporating on the earth's surface, depositing the material which they were carrying mechanically or by saturation, as a blanket over the subsisting surface of the ground; and any deposit covering the earth as a blanket, such as guano, the excrement of birds, and phosphate, the secretion and remains of animals; these when in loose form or even cemented, but not solidified to the point of being rock, would be located as placers, even though buried far below the surface, as in the case of the deep-lying gold-bearing gravel beds of California. When the loose placer deposits harden and become solid rock, as sandstone, limestone, phosphate rock, or marble, he would still call them placer deposits, even though lying far beneath the surface and a part of the stratified rock formations. However, the law does not appear to take this view in the latter case; whatever could be classified as building stone is subject to placer location unquestionably, not because of any original placer formation—granite would not have originated as a placer—but because of the special Act authorizing placer locations on such deposits. Such of this class of deposits as cannot come under the head of building stone, become "rock in place" and apparently subject to lode location, though nothing conclusive can be said; when these last deposits contain some mineral for which they are valuable, as sandstone containing gold, or limestone containing phosphate (phosphate rock), it appears that they become "rock in place bearing * * * valuable deposits" and subject to lode location. This is the view taken by the Land Department. It may be noted that this refers to "rock in place bearing * * * valuable deposits". What view would be taken of "rock in place" that did not bear any valuable deposit or contain anything other than the rock of which it was composed and that could not be construed as building stone, is unknown; apparently such deposits are seldom located. Where there is doubt as to whether

a placer or lode location should be made, the ground should be located under both forms and patent application first made under that form which appears best adapted.

Another factor is the type of deposit. Asphaltum filling a fissure was required to be located as a lode; when occurring as a surface deposit, it was to be located as a placer. Marble was patented under the placer laws as building stone; onyx occurring as a lode filling a fissure in limestone was patented as a lode. Apparently deposits having the physical characteristics of lodes, even though not formed as lodes usually are, should be located as lodes.

As an exception to the theory of what is locatable as placer is an early ruling of the Land Department that common brick clay is not to be patented as placer, but under agricultural entry, it being held that common brick clay is not a mineral within the meaning of the mining laws; and a recent ruling to the same effect regarding sand and gravel, the Land Department saying, "Deposits of sand and gravel, suitable for mixing with cement for concrete construction, but having no peculiar property or characteristic giving them special value, and deriving their chief value from proximity to a town, do not render the land in which they are found mineral in character within the meaning of the mining laws, or bar entry under the homestead laws, notwithstanding the land may be more valuable on account of such deposits than for agricultural purposes". These two interpretations seem at variance with the mining laws to those unfamiliar with public-land conditions. At present there is a great hunger for land. Public agricultural-land can only be obtained under the Homestead or similar Acts from the Government or by the more costly method of purchase through the owners of large floating grants. To take up public agricultural-land under the placer laws as being valuable for clay, sand, or gravel, would be a convenient and easy method, and would lead to large areas being acquired in this way, for almost any piece of agricultural land could be located for these substances.

The maximum size claim that one person may locate is 20 acres. 'Association claims' may be taken up by a group or association of two or more persons, in which the claim may be en-

larged 20 acres for each individual in the association, up to the limit of 160 acres. Two people may locate 40 acres as one claim, five may locate 100 acres, or eight or more may locate 160 acres. No claim larger than 160 acres may be located. Most placers are located as association claims, and the right is much abused. A man may secure the consent or take the power-of-attorney of seven of his acquaintances, and there is no way to prevent him from locating an unlimited number of 160-acre placer claims, for as with lode locations, there is no limit under the Federal Statutes to the number of placer claims one may locate. Association claims located for a single individual are invalid. A corporation is considered an individual and may locate claims of only 20 acres each.

An annual labor expenditure of \$100 will hold an association claim of any size just the same as a 20-acre claim. Likewise with reference to the \$500 expenditure for patent purposes. These claims are staked as single claims, that is, a 160-acre claim is staked 160 acres large and not into 20-acre blocks.

A single discovery is sufficient to validate a 160-acre or lesser claim, but the Land Department has said, "while a single discovery is sufficient to authorize the location of a placer claim, and may in the absence of any claim or evidence to the contrary, be treated as sufficiently establishing the mineral character of the entire claim to justify the patenting thereof, such single discovery does not conclusively establish the mineral character of all the land included in the claim, so as to preclude further inquiry in respect thereto." This is taken to mean that on a protest being made that part of a claim was without mineral and more valuable for some other purposes, the claim might be reduced to the proved or known mineral portions only. The Land Department also holds that where an association placer claim is transferred to a single person before a discovery has been made to validate it, a discovery after the transfer will only perfect the claim to the extent of 20 acres—the maximum a single person can locate, except oil claims where development work had been started before land was withdrawn from oil location—as provided by a special Act of Congress.

There are two forms of placer locations, those conforming to

legal subdivisions and the system of public-land surveys, and 'gulch placers' which are shaped to suit the desires of the locator. Placers should conform to legal subdivisions both upon surveyed and unsurveyed land, unless it can be convincingly shown that such procedure is not merely impracticable, but highly so, in which case a gulch may be located. Gulch placers must be consistent in shape and without the overlapping of other claims so common in lode location.

The smallest legal subdivision is 40 acres in all cases, with the single exception of placers, where the 40 acre-tracts may be subdivided into four square 10-acre tracts, each 660 ft. square. For a single locator to locate the maximum size of 20 acres, it is only necessary to appropriate two of these tracts, if upon surveyed land. Larger claims are made by the simple process of adding contiguous 10-acre subdivisions or blocks. The illustration (Fig. 17) shows the method of locating gold-bearing gravel along a creek by legal subdivisions upon surveyed land. The location B of a single locator could not have been included with A, since it only corners. Except in rare cases, time, money, and trouble may be saved by taking up placer claims upon surveyed land by the legal subdivisions instead of making a gulch-placer location.

Regarding placers upon unsurveyed land, the Land Department has said that such locations shall conform as nearly as practicable to the "system of public-land surveys and the rectangular subdivisions of such surveys," by making the location as nearly as reasonably practicable, rectangular in form, compact, and with east-west and north-south bounding lines. It considers claims satisfactory when those of one or two persons can be entirely included within a square 40-acre tract; when a claim located by three or four persons can be entirely included in two, square, 40-acre tracts placed end to end; when a claim located by five or six persons can be entirely included in three, square, 40-acre tracts; or a claim located by seven or eight persons can be entirely included in four, square, 40-acre tracts; but it is not intended that the 40-acre tracts shall necessarily have east-west and north-south boundaries.

It has been customary to locate placer claims of 20 acres by taking up two square 10-acre blocks, making a rectangle 1320 by

660 ft., without reference to the boundaries being east-west and north-south. Larger claims have been made by adding or uniting 20-acre tracts. The Land Department favors this method when the larger claims are fairly compact in shape, but says that each

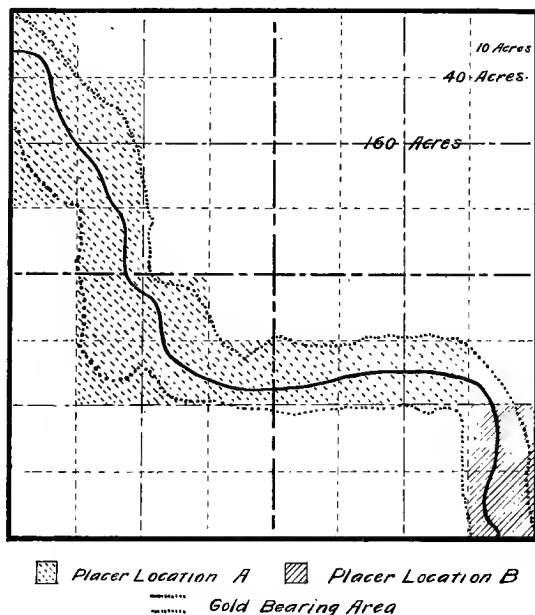


Fig. 17

claim must be judged and decided upon its own facts, meaning that while it may not require a strict compliance with the plan in the preceding paragraph, it will not permit long, narrow, and fantastically shaped claims to go to patent. In one instance patent was asked for a single claim over 16 miles long, with an average width of 51 ft., and containing 102 acres. Where the ground is surrounded by other claims, or under other exceptional

conditions, a considerable departure from the theory may be allowed. A claim taken up by legal subdivision may include segregated pieces of land so made by excluding areas belonging to others; claims not taken up by legal subdivisions will probably be allowed to include segregated pieces of land where it is shown to be the logical method of locating the ground. The reason that so little sanction is given to including segregated pieces of ground in a placer claim or placing its corners on the ground of others, whereas it is sanctioned with lode claims, is on account of the fundamental difference between the two classes of claims due to the great importance of the law of extralateral or apex right, and the necessity, in conforming to that law, of extending lode-claim lines over the ground of others and placing the corners upon the claims of others.

Placer claims upon unsurveyed land should be staked at each corner. As to whether a placer location by legal subdivisions upon surveyed land needs to be staked, there have been decisions for and against in the courts. The Land Department will accept for patent such a location without staking, but the better view is that staking should be done, and the miner is advised to take no chances. A location notice stating for what the location has been made should be posted upon the claim and recorded.

It is often asked if the claims of two individual locators may be united as one claim, thus allowing the annual labor that would be required upon a single claim, to hold the enlarged claim. So far as can be learned the Land Department and the courts have not passed upon this point. However, it does not appear why an amended location or a relocation could not be made for this purpose. In fact the Statute would appear to sanction this, for it says "and two or more persons, or associations of persons, having contiguous [placer] claims of any size, although such claims may be less than 10-acres each, may make joint entry thereof." But such a relocation or amended location should be consistent with the requirements of the law, that is, the joint owners should own the ground jointly and not the separate parts as formed by their former claims, nor should they unite their claims for the purpose of making the work done

under the former locations equal \$500 for patenting the joint claim, with the idea of dividing the claim immediately after patent is obtained.

A placer location, no matter for what it has been made, takes all minerals subject to location as placers, and after application for patent takes all lodes except known lodes, which subject will be treated in the next chapter.

Salt Deposits and Salt Springs

ACT OF CONGRESS: That all unoccupied public lands of the United States containing salt springs, or deposits of salt in any form, and chiefly valuable therefor, are hereby declared to be subject to location and purchase under the provisions of the law relating to placer-mining claims; provided, that the same person shall not locate or enter more than one claim hereunder.

This Act is operative in all the public lands of the United States, and not in the mining-law States alone. It is only by the production of salt through the usual processes that a saline spring or deposit becomes subject to placer location, and the use of a salt spring as a bathing resort instead does not tend to validate a placer location.

Building Stone

ACT OF CONGRESS: That any person authorized to enter lands under the mining laws of the United States, may enter lands that are chiefly valuable for building stone under the provisions of the law in relation to placer-mineral claims; provided, that lands reserved for the benefit of the public schools or donated to any State shall not be subject to entry under this Act.

It will be observed that the right to locate building-stone placers upon school and State lands is denied, whereas all other placers may be located and patented upon such lands under the conditions stated in the chapter on 'Where locations may be made.' Building stone, upon surveyed land, may also be secured under the Timber and Stone Act as well as by placer location, but upon unsurveyed land by placer location only.

Petroleum and Oil

ACT OF CONGRESS: That any person authorized to enter lands under the mining laws of the United States, may enter and obtain patent to lands containing petroleum or other mineral oils, and chiefly valuable therefor, under the provisions of the laws relating to placer-mineral claims.

ACT OF CONGRESS: That where oil lands are located * * * as placer mining claims, the annual assessment labor upon such claims may be done upon any one of a group of claims lying contiguous and owned by the same person or corporation, not exceeding five claims in all; provided, that said labor will tend to the development or to determine the oil-bearing character of such contiguous claims.

The placer-mining laws are not well adapted for locating oil lands, but in the absence of suitable laws, oil lands were located as placers until the Land Department ruled that oil was not a mineral and that oil lands should not be taken up as placers. This resulted in Congress passing the above Statute legalizing the location of oil lands as placers. The whole forms an excellent example of the apathy in formulating and enacting suitable mining laws.

The discovery of oil necessary to validate an oil location must be a discovery of actual oil in material quantities sufficient to justify the belief that oil in commercial quantities may exist; indications, oil formations, and oil seepages will not suffice. Until the locator discovers oil, which usually means the expenditure of considerable time and money, the courts will protect him in his possession of the ground to the fullest extent that they are able, while he is attempting in good faith to discover oil; but just as with a lode location, there is no valid location until a discovery is made, and others have more or less right to attempt to make a discovery as well as the prior claimant. The location of land more valuable for oil than for other purposes under the guise of locating for other mineral is invalid and cannot be sustained under protest or perfected to patent.

The new land-withdrawal law does not allow locations for oil to be made upon withdrawn areas, but says concerning al-

ready existing oil locations, "that the rights of any person who, at the date of any order of withdrawal heretofore or hereafter made, is a *bona fide* occupant or claimant of oil or gas-bearing lands, and who, at such date is in diligent prosecution of work leading to discovery of oil or gas, shall not be affected or impaired by such order, so long as such occupant or claimant shall continue in diligent prosecution of said work. And provided further, that this Act shall not be construed as a recognition, abridgment, or enlargement of any asserted rights or claims initiated upon any oil or gas-bearing lands after any withdrawal of such lands made prior to the passage of this Act."

Since the Land Department holds that where an association placer claim is conveyed to a single individual before a discovery is made, the subsequent discovery will only validate 20 acres of the claim, the Act of March 2, 1911, was passed to allow association oil claims upon which development work had been started before the land was withdrawn from location, to become valid to their full extent, even if transferred to a single individual before discovery. The Act reads:

ACT OF CONGRESS: That in no case shall patent be denied to or for any lands heretofore located or claimed under the mining laws of the United States containing petroleum, mineral oil, or gas solely because of any transfer or assignment thereof or of any interest or interests therein by the original locator or locators, or any of them, to any qualified persons or person, or corporation, prior to discovery of oil or gas therein, but if such claim is in all other respects valid and regular, patent therefor not exceeding one hundred and sixty acres in any one claim shall issue to the holder or holders thereof, as in other cases; provided, however, that such lands were not at the time of inception of development on or under such claim withdrawn from mineral entry.

CHAPTER XIV

Lodes Within Placers

R. S., Sec. 2333: Where the same person, association, or corporation is in possession of a placer claim, and also a vein or lode included within the boundaries thereof, application shall be made for a patent for the placer claim, with the statement that it includes such vein or lode, and in such case a patent shall issue for the placer claim, subject to the provisions of this chapter, including such vein or lode, upon the payment of \$5 per acre for such vein or lode claim and twenty-five feet of surface on each side thereof. The remainder of the placer claim or any placer claim not embracing any vein or lode claim shall be paid for at the rate of \$2.50 per acre, together with all costs of proceedings; and where a vein or lode, such as is described in section 2320, is known to exist within the boundaries of a placer claim, an application for a patent for such placer claim which does not include an application for the vein or lode claim, shall be construed as a conclusive declaration that the claimant of the placer claim has no right of possession of the vein or lode claim; but where the existence of a vein or lode in a placer claim is not known, a patent for the placer claim shall convey all valuable mineral and other deposits within the boundaries thereof.

The intent of the above Statute was to place known lodes in placer claims open to exploration and purchase by those interested in the working of lodes, instead of allowing them to remain idle and undeveloped through having come unsought into the possession of those only interested in placers. Also, that the greater ease and less cost by which placer ground may be obtained might not induce placer location and patent over ground only nominally placer for the purpose of obtaining any lodes which it was known to contain. The law has not been fully worked out, since practically all of the court decisions

cover cases of lode location after issuance of the placer patent. The Statute is not operative on claims patented prior to the date of its passage, May 10, 1872; such earlier patented claims include the right to the known lodes.

A lode, to come within the scope of this law, must be known at date of application for patent upon the placer claim. Lodes discovered afterward are the property of the placer patentee, even in the case of a lode that, without showing or being exposed on the placer claim, was being worked on an adjoining claim and later was followed on its strike into the placer claim after the application for placer patent. A lode that is considered valueless or that has been abandoned as worthless, is not such a known lode. It must have a value that will justify exploration: It must approach the conditions whereby a lode location defeats an agricultural entry. A valid lode location made prior to a conflicting placer location takes its full area. A lode location made under the Statute in question after the placer location, is entitled to fifty feet in width along the vein—twenty-five feet on each side. When patent is asked by the placer claimant, the proper procedure for the lode claimant is to secure exclusion of his lode strip or adverse the patent to that extent. If successful, he will be enabled to secure his lode patent in the usual way. If this precaution is not taken, or in the case of a lode location made after placer patent, when the lode claimant asks for his patent, hearing will be held to determine by the facts presented, if the lode is a known lode as contemplated by the Statute, and the Land Department has the right in consequence to grant such a patent.

A mooted question is, has the placer claimant, before making application for placer patent, the possessory right to and the refusal of all known lodes without having located them as such? One conclusion of the Statute is that he has. A court decision says that a stranger cannot enter within the lines of a placer location to prospect for lodes, and if he does so enter and discovers and locates a lode, it is a claim initiated by trespass and is void. But such a discovered lode now becomes a known lode, just as any lode uncovered in any way or by anyone up to application for patent. The placer claimant or one to whom

he has given his consent may locate a lode. The Land Department has taken the stand that a placer locator has not the possessory right to the lodes within his location, so as to prevent the discovery and location of such lodes by others. This is the proper view, for under that of the court decision referred to, all the veins as well as the placer mineral in a 160-acre placer location could be held by doing \$100 worth of work annually. Undoubtedly, if a case came into court, the good faith of the placer claimant would be the greatest factor in determining how far a stranger might go in clandestinely prospecting for and locating the lodes within a placer location. The placer locator may perhaps strengthen his right of possession to the known lodes by inserting in his placer location notice, the proviso, 'including the right to locate and patent all known lodes.' But the proper plan is to at once locate all desired lodes. Lodes within placers should be located in the usual way, with the exception that fifty feet is the maximum width.

CHAPTER XV

Tunnel Site Location

R. S., Sec. 2323: Where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid, but failure to prosecute the work on the tunnel for six months, shall be considered as an abandonment of the right to all undiscovered veins on the line of such tunnel.

ACT OF CONGRESS: That section 2324 of the Revised Statutes [requiring annual labor] be, and the same is hereby amended, so that where a person or company has or may run a tunnel for the purpose of developing a lode or lodes, owned by said person or company, the money so expended in said tunnel shall be taken and considered as expended on said lode or lodes, whether located prior to or since the passage of said Act; and such person or company shall not be required to perform work on the surface of said lode or lodes in order to hold the same as required by said Act.

"The effect of section 2323, Revised Statutes, is to give the proprietors of a mining tunnel run in good faith, the possessory right to 1500 ft. of any blind lodes cut, discovered, or intersected by such tunnel, which were not previously known to exist within 3000 ft. from the face or point of commencement of such tunnel, and to prohibit other parties, after the commencement of the tunnel, from prospecting for and making locations of lodes on the line thereof and within said distance of 3000 ft., unless

such lodes appear upon the surface or were previously known to exist. The term 'face' as used in said section, is construed and held to mean the first working face formed in the tunnel, and to signify the point at which the tunnel actually enters cover; it being from this point that the 3000 ft. are to be counted, upon which prospecting is prohibited as aforesaid.

"To avail themselves of the benefits of this provision of law, the proprietors of a mining tunnel will be required, at the time they enter cover as aforesaid, to give proper notice of their tunnel location by erecting a substantial post, board, or monument at the face or point of commencement thereof, upon which should be posted a good and sufficient notice, giving the names of the parties or company claiming the tunnel right; the actual or proposed course or direction of the tunnel, the height and width thereof, and the course and distance from such face or point of commencement to some permanent well known objects in the vicinity, by which to fix and determine the locus in manner heretofore set forth applicable to locations of veins or lodes, and at the time of posting such notice they shall, in order that miners or prospectors may be enabled to determine whether or not they are within the lines of the tunnel, establish the boundary lines thereof, by stakes or monuments placed along such lines at proper intervals, to the terminus of the 3000 ft. from the face or point of commencement of the tunnel, and the lines so marked will define and govern as to specific boundaries within which prospecting for lodes not previously known to exist is prohibited, while work on the tunnel is being prosecuted with reasonable diligence. A full and correct copy of such notice of location defining the tunnel claim must be filed for record with the mining recorder of the district, to which notice must be attached the sworn statement or declaration of the owners, claimants, or projectors of such tunnel, setting forth the facts in the case; stating the amount expended by themselves and their predecessors in interest in prosecuting work thereon; the extent of the work performed, and that it is *bona fide* their intention to prosecute work on the tunnel so located and described with reasonable diligence for the development of a vein or lode, or for the discovery of mines, or both,

as the case may be. This notice of location must be duly recorded, and with the said sworn statement attached, kept on the recorder's files for future reference." (*Land Office Regulations, 16, 17, 18.*)

A tunnel-site location is not strictly a mining claim, but gives an inchoate right which may be developed to patent blind and unknown lodes cut by the tunnel. The rights and requirements are succinctly stated in the Statutes and regulations above. The locator, on commencing work, acquires the right to all veins which may be cut by the tunnel within 3000 ft. of its portal; provided, these veins do not exist on the surface, but are blind veins whose existence has theretofore been unknown. The right entitles him to 1500 ft. of the strike of each vein cut, all on one side of the tunnel or divided as he may desire, and from the apex to the lowest depth, just as if located on the surface. He acquires no specific rights by this location over any prior locations, no right to any blind lodes apexing in their ground which he may cut, or right-of-way through their ground. All locations made subsequent to the commencement of work in the tunnel are made on the peril of losing any blind veins apexing in them, which the tunnel locator may be entitled to through cutting in his tunnel, and which are subject to his right-of-way.

Tunnel rights are dependent upon the work being prosecuted with "reasonable diligence." What is reasonable diligence has not been passed upon. Failure to prosecute work on the tunnel for six months loses the right to all blind veins which may be cut later, but not to the tunnel, which may be continued. As the claimant is allowed 1500 ft. in any direction of all blind veins cut throughout the 3000 ft. of his tunnel, he practically commands an area in the shape of a race-track, 6000 ft. long and 3000 ft. wide, as shown in Fig. 18. Some have considered that the claimant's rights should be confined to 1500 ft. on each side of the tunnel, making a square 3000 by 3000 ft., but there is no direct reason why he should not receive his 1500 ft. of lode, even if found at one end of the tunnel and striking outside of the square. The Land Office regulation, that the boundary lines of the tunnel should be staked, is held to mean that the length and width of the proposed tunnel should be exactly

shown by two parallel lines of stakes. It seems inconsistent to run two lines of stakes to simply exhibit the width or bore of the tunnel; the regulations probably purposed, not the boundaries of the tunnel, but of the area within which prospecting was practically prohibited.

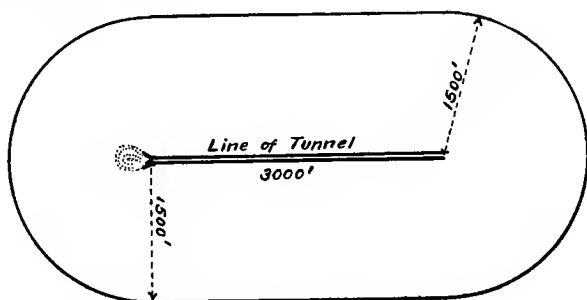


Fig. 18

There is no necessity for a tunnel locator to adverse the application for patent of a subsequent lode location, to preserve his rights to any blind lodes which he may cut. The Statute protects him in that respect; but he should adverse to protect any already cut lodes upon which he may wish to secure surface area.

A millsite location for dumping area should be made in connection with a tunnel-site location. Often a small area of ground is included in the tunnel-site location for that purpose. Unfortunately, the law has made no reference to dumping-ground, and though both methods of obtaining such space will undoubtedly be protected, the millsite location is preferable, and it can be patented when any of the lodes cut are patented.

When the claimant has cut a vein which he may consider worthy of appropriating, he has made a mineral discovery, and in consequence should locate the lode or ground which his tunnel right has reserved until he could make a discovery. If the structural features and proximity of the vein to the surface are

such as to enable one to say with positiveness where the apex should be on the surface, the location should be laid out upon the surface with the location stake equidistant from the side lines and upon the presumed apex over the discovery below. The intersection of the vein and tunnel must be within the claim. No surface work or surface discovery is required. The claimant can now proceed to patent upon the work done in the tunnel. If the claim cannot be laid out upon the surface, due to the vague whereabouts of the apex, the vein should be located by placing a location notice describing it, at the mouth of the tunnel, and recording the same. If the claim is not laid out on the surface, it is of course impossible to patent the vein. Annual labor will be required in both cases, unless patented, and may be done through the tunnel. It is sometimes possible in the case of a long tunnel run for the development of a distant group of claims, to locate the tunnel as a tunnel site, and apply the work therein as annual labor and patent work upon any blind lodes cut and the located claims ahead.

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CHAPTER XVI

Patent

R. S., Sec. 2325: A patent for any land claimed and located for valuable deposits, may be obtained in the following manner: any person, association, or corporation authorized to locate a claim under this chapter, having claimed and located a piece of land for such purposes, who has, or have, complied with the terms of this chapter, may file in the proper land office an application for a patent, under oath, showing such compliance, together with a plat and field notes of the claim or claims in common, made by or under the direction of the United States surveyor-general, showing accurately the boundaries of the claim or claims, which shall be distinctly marked by monuments on the ground, and shall post a copy of such plat, together with a notice of such application for a patent, in a conspicuous place on the land embraced in such plat previous to the filing of the application for a patent, and shall file an affidavit of at least two persons that such notice has been duly posted, and shall file a copy of the notice in such land office, and shall thereupon be entitled to a patent for the land, in the manner following: the register of the land office, upon the filing of such application, plat, field notes, notices, and affidavits, shall publish a notice that such application has been made, for the period of sixty days, in a newspaper to be by him designated as published nearest to such claim; and he shall also post such notice in his office for the same period. The claimant at the time of filing this application, or at any time thereafter, within the sixty days of publication, shall file with the register a certificate of the United States surveyor-general that \$500 worth of labor has been expended or improvements made upon the claim by himself or grantors; that the plat is correct, with such further description by such reference to natural objects or permanent monuments as shall identify the claim, and furnish an accurate description to be incorporated in the patent. At the expiration of the sixty days of publication the claimant shall file his affidavit, show-

ing that the plat and notice have been posted in a conspicuous place on the claim during such period of publication. If no adverse claim shall have been filed with the register and the receiver of the proper land office at the expiration of the sixty days of publication, it shall be assumed that the applicant is entitled to a patent, upon the payment to the proper officer of \$5 per acre [for lode claims, or \$2.50 for placer claims], and that no adverse claim exists; and thereafter no objection from third parties to the issuance of a patent shall be heard, except it be shown that the applicant has failed to comply with the terms of this chapter [the mining-law Statutes].

The steps by which the miner develops or constructs his title or ownership to a lode or placer claim, are by initiating a possessory right by making a discovery, completing it by the acts of location and record, maintaining it from year to year by annual labor; and perfecting it to the fee-simple or absolute title after placing \$500 worth of improvements upon it, by obtaining patent for it from the General Land Office at Washington, through entry and purchase at the local land office.

Much has been said and written about the strength and dignity of the possessory right acquired by location. The exaltation accorded the possessory right comes from its being the first guardian of mining rights, the swaddling clothes of a great industry, rather than from any inwrought strength to protect the miner's acquisition. It was a wise provision of the law that made location of a claim easy. Had the miner or prospector been required to go forth fully panoplied as a surveyor and attorney, perhaps as a mineralogist and geologist also, with forms and legal details and red tape to comply with, the result would have been a woeful decrease in the locations made, the holes dug, and the mines found. But what comes easily, too often goes easily. Likewise, the possessory right acquired so easily, is lost too easily. The lode that looks good and arouses interest sufficiently to acquire it by possessory right today, will perhaps develop tomorrow into something considered worthy of holding permanently. The locator should then change his easily obtained, easily lost title to the strong and secure one of patent. It has passed into an axiom that to de-

velop a mine on unpatented ground is to develop a lawsuit. Parties engaged in acquiring and developing mineral ground seldom examine unpatented claims, unless they contain an extraordinary showing. The statement is often made that the possessory right should be made safer and more conclusive by changes in the law and location methods, but no feasible methods have been suggested. One of the suggested methods is to require that the location be entered in the local land office and platted in the tract books, no other entry to be allowed upon the land until the existing one is canceled through failure to file proof of annual labor. This would require a careful survey, and would defeat the idea of making location easy, with its attendant good results. The possessory right of location is good and cannot be dispensed with, but there is a point where its advisability is passed, and the wise miner who has ground which he values, will patent it at the earliest convenient and possible opportunity. Between the two extremes of possessory right and patent, both so necessary, there appears no practical intermediate. The best method to follow, if conditions or means do not warrant doing more than the annual labor each year, is to perform the work in a common improvement or system of improvement, and as soon as \$500 worth of work has been done, patent the most valuable claim of the group, and as each additional \$500 expenditure is made, patent an additional claim. Such proceedings are now permitted under most conditions.

The miner may take steps toward securing patent as soon as he has made a valid location according to the Federal Statutes. He may apply for an official patent survey on the same day the location is made, and proceed as speedily toward patent as under any other conditions, since the \$500 worth of improvements may be made at any time before the expiration of the sixty-day period of publication of notice of application for patent. Again, the miner may delay applying for patent as long as he wishes, or need never ask for it, but continue to hold his claim by location or possessory right.

The obtaining of patent to a mining claim requires careful compliance with many details and is a somewhat lengthy procedure. To the layman, the various details and the extent to

which it is insisted that they be complied with, seem uncalled-for technicalities and red tape. But the man in contact with them, in office and field, sees their wisdom and necessity. Were it not for the painstaking work of the surveyors-general and the Land Office, there would be, from the conditions prevailing in mining, loopholes for endless litigation, and to a still greater extent would the rights of miners and the general good be trespassed upon in a way that could hardly be reached through litigation. Proceedings to obtain patent may be divided into three stages: (1) The official patent survey; (2) making application for patent and informing the world thereof, that they may take steps to protect any asserted rights; (3) entering the land, paying the purchase price, and receiving patent, after the Land Office has determined applicant's right to purchase the land. Essentially, obtaining patent to a mining claim is simply obtaining title to the land from the United States, just as title to a piece of agricultural or timber land would be obtained.

A claim held by possessory right requires annual labor each year. It is exposed to being located over in whole or part at any time, and during a long absence of the claimant is liable to be patented by others, unless he is continually on the outlook. Even the lines of his location may be changed by confining his ground to 300 ft. on each side of the exposed lode. If the showing of mineral be poor, it may be contested and perhaps defeated by an agricultural or other entry. It must be on the guard against patent application of conflicting locations, and adverse them. A claim held by patent belongs to the owner without any conditions, except those attached by the law of extralateral right, known lodes in placers, or tunnel-site locations. All questions of adverse ownership of the ground or of defects in the location or possessory right, are estopped by the issuing of patent and cannot thereafter be raised. Except the patented claim be sold for unpaid taxes or seized for debt, the owner cannot be divested of it, however much he may neglect it, unless he has acquired it by fraud or error in the law. If acquired by fraud which can be clearly and convincingly shown, the patent may be broken or cancelled by suit brought for the

Government by the U. S. Attorney-General or his assistants. But the Statute of Limitations prescribes that such suits can only be brought within six years after date of issuing patent. Suits to annul a patent generally cannot be brought against an innocent purchaser. A patent issued through error or mistake in the law, or which is not authorized by law, is invalid and can be cancelled. Where the patent has been obtained by the wrong party through fraud, suit may be brought to hold him as the trustee of the patent until conveyed to the rightful owner. After patent has been issued by the Land Department, it has lost all jurisdiction over the land and cannot recall patent under any condition, even if the patent document has not been delivered to the claimant. What may be termed double patent can issue in certain cases, as patent for mining claims on original State or railroad sections, or on townsites, and known lodes patented on prior placer patents.

CHAPTER XVII

Lode Patent—Survey

No title, beyond that of possession, can be obtained to an unsurveyed tract of public land. No agricultural entry can be made until the land has been officially surveyed and platted into sections. Likewise, no patent can be asked for a mineral location, until an official survey of the location has been made and approved, with the exception of placer claims conforming to legal subdivisions and upon surveyed land. The surveyors-general of the different land districts, having charge of all official surveys of public lands, are empowered to appoint deputy mineral surveyors to make official surveys of mining claims for patent. The appointments can be secured by any one who has the necessary proficiency in the work, is of good character, and can give the required bond. Examinations are given for those who have not attended accredited schools. The instructions regarding the survey of mining claims are issued by the General Land Office under the title 'Manual of Instructions for the Survey of the Mineral Lands of the United States.' They form Appendix C of this work.

The applicant for a mineral survey should first select a deputy mineral surveyor of the land district, and arrange with him on the consideration for the survey. The surveyor's charges are paid by the applicant; the Government has nothing to do with them, beyond requiring that they be not excessive. The applicant should discuss with the surveyor, the 'Circular to Applicants for Mineral Surveys,' appearing as Appendix A of the 'Manual of Instruction for the Survey of the Mineral Lands of the United States,' and especially considering as to whether a preliminary survey should be made before obtaining an official order for survey. The applicant then, or after preliminary survey, if one be made, applies to the surveyor-general of the district for an

official order of survey, to be executed by the selected deputy. Application should contain name or names of the applicants in full, of each location, of the land and mining district, and of the deputy desired. Accompanying must be certified copies of the recorded original and any amended location notices of each location. The applicant must deposit with some assistant U. S. Treasurer or designated depository, to the credit of the U. S. Treasurer, a sum sufficient to cover the charges in the surveyor-general's office. Triplicate certificates of deposit are taken. The original is mailed to the Secretary of the Treasury at Washington, the duplicate is enclosed with the application to the surveyor-general, and the triplicate is retained by the applicant.

The charges in the different offices of the surveyors-general for checking and platting the survey vary, but are about as follows: For lode claims, singly or in groups, each, \$30; for placer claim, \$35; for millsite claim, \$30; for millsite included with lode survey, \$30; for each lode location included in placer survey, \$30; for group of placer locations, first location, \$35; for group of placer locations, all after first location, each, \$30; for affidavit of \$500 expenditure, filed after approval of survey, \$5. Should an amended order for survey issue, an additional deposit will be required. By a recent Act of Congress, any excess in the amount of deposit, over and above the actual cost of work performed, or the whole of any unused deposit, will be returned.

The surveyor-general gives the application a number by which the survey is thereafter known, and issues an order for the survey to the designated deputy, enclosing copies of the location notices filed. The survey will have priority in being checked, platted, and approved in the surveyor-general's office, over all subsequent numbered surveys, unless it should be abandoned or the applicant and deputy should still continue to delay filing the survey notes after notice is given them to do so.

The next step is for the deputy mineral surveyor to go upon the claim with his instruments and assistants, and make the survey. He must personally take charge of the field work. In making the survey, which may be a single location or a group, for the contiguous claims of an applicant may be jointly surveyed under one application and number, each location must be surveyed

as a separate claim. The lines of the patent survey must be kept within the lines of the location as determined by its staking, not by the specifications of the location notice. The lines may be drawn in and within the location boundaries to accomplish any desired or necessary end, but they cannot be extended beyond. Surveyors do sometimes extend their lines and set patent corners outside the area of the location, representing or placing location corners where they were not. This is in defiance of strict orders of the Land Department, and when detected, invariably requires a corrected survey and all subsequent steps taken anew. If the deputy finds serious discrepancies between the location notice and the claims as staked, or in the case of a group poorly laid out, must leave many fractions that defeat the contiguity of the claims, he will report the circumstances to the surveyor-general, and an amended order for survey will be arranged for, to include certified copies of the amended location certificates filed after the lines are straightened out and corrected by a preliminary survey. The amended order for survey may perhaps be given a new number.

It is practically impossible to survey a group of claims for patent, unless they have at some time been surveyed in a preliminary way and the corners adjusted, which of course requires an amended location. The preliminary survey is often made just as a patent survey, and after order for survey is issued and a number assigned, the deputy returns and merely marks the posts. This is not in harmony with the Land Office regulations saying that the patent survey must be made by the mineral surveyor in person, after receipt of order, and without reference to any knowledge he may have previously acquired by reason of having made the location survey or otherwise. It may be asked, why should the requirement that the patent lines of each claim keep within the location, be so rigidly enforced? Because if it were not so enforced, patent lines would be thrown outside of the locations indiscriminately, and the locations of others encroached upon.

The deputy is required to identify the stakes or corners of the locations, or learn from reliable authority where they existed, and represent them upon his plat by bearing and distance from

the patent corner, if not identical. On the plat these location corners are indicated by the letters L. C. While the disappearance of the corner stakes of a location does not invalidate it, the applicant may save himself trouble by resurrecting them before patent survey is made. The survey should be made by traversing the claim, running all the boundaries. It is not necessary to run the theoretical lode or centre line, though the discovery post on it must be accurately set. Claims are often surveyed in opposition to Land Office rules by running the centre or lode lines and making offsets to the corners. A corner post or monument must be set at each corner or angle of the claim boundaries, and a discovery post on the centre or lode line at the point mentioned in the location certificate as the location or discovery point or stake.

The corners may be a rock approximating 24 inches in length, with a mound of stone alongside, a rock in place, or, and generally, a dressed post four inches square and three feet or more long. Iron pipes with brass caps similar to the bench-marks of the Geological Survey and the corners now being used in public-land surveys, are recommended by the Land Department. The corner nearest a public-land survey corner or mineral monument, is always taken as corner No. 1 of the claim. This corner should be marked on the side facing the claim with the initials of name of the claim, the claim corner number, and the survey number, as 'N.Y.—1—4750,' which means, corner No. 1 of patent survey No. 4750 of the New York claim. A few of any suitable trees within reasonable distance should be blazed on a side facing the corner post as bearing trees, marked 'B.T.—N.Y.—1—4750,' and recorded in the survey notes. Large rocks in place may also be used for this purpose as bearing rocks, marked B.R., etc. Where the corner cannot be set at the proper point, a witness corner is placed on the line as near point as possible, and inscribed with the initials W.C., in addition to the other markings. The corners of each claim are numbered consecutively from 1 up, as above. The discovery post in this survey should be marked 'Dis.—N.Y.—4750.' If two or more claims corner in the same spot, the same post should be used, even if the claims are owned by different people. The initials, the corner number, and the

survey number of each claim should go on the proper faces of the post. It is only recently that the practice of initialing the posts has been established; most older claim stakes are without the claim initials. Where a post is the corner of several claims of the same survey number, the corner numbers have sometimes all been placed on one face, as 1—1—2—4—4750, whereas the better way would have been as stated before, 1—4750, 1—4750, 2—4750, and 4—4750 on the proper faces. Corner No. 1 of each claim must be connected with a section or quarter-section corner of the public-land surveys or a mineral monument, if within two miles, preferably with a public-land survey corner. In the absence of either within that distance, a new mineral monument should be established. This tie line must be run and not obtained by previous knowledge or ties calculated through other points. With a group, it is customary to connect the corner of one claim with the tie monument by an actual line, and calculate the other required ties through the survey lines of the group. The conflicts and contiguity with other patent surveys must be shown, but those with unsurveyed claims need not be.

The deputy cannot make an official survey of any claim in which he holds any interest, real or contingent. He cannot act as an attorney in the patent application. He cannot employ chainmen interested in the property. He must correct errors in the survey due to carelessness or neglect, at his own expense, under penalty of suspension.

At time of making the survey, the development work or expenditure of \$500 for the benefit of each claim is measured up; or if it is not performed or finished at that time, the deputy may return later and measure it.

Returning from the field, the deputy prepares his field notes and plat, and files them with the surveyor-general. The employees of the surveyor-general's office check the field notes and compare them with adjoining official surveys. Many errors are bound to occur in view of the close accuracy required, which the deputy must correct. From the corrected notes and plat, the final plat is made up, and the claim or claims platted upon the 'connected plat' of the surveyor-general, which contains and shows the relative positions of all the claims in each district.

The corrected field notes, known as the 'approved field notes', and plat are retained in bound form in the surveyor-general's office, open to public inspection. The surveyor-general sends one copy of the plat to the local land office in which patent application must be filed, and two copies of the plat and one of the approved field notes to the deputy mineral surveyor for the applicant.

The surveyor-general's connection with the proposed patent now ceases, unless the \$500 expenditure has not been filed. This may be filed subsequent to the field notes. It is the sworn statement of the deputy regarding the work done, its value, and that it has been performed by the patent applicant or his grantors. The surveyor-general examines this to see that the work is of the character and the amount required, approves it, and forwards his certificates to the deputy or the local land office.

The applicant, by these survey proceedings, acquires no further right to the ground beyond that contained in his possessory right, than such additional constructive right as the better marking of his claim and the official filing of its exact position and boundaries may give. It is just as necessary to perform annual labor, and to adverse the prior application for patent of any conflicting location, as before steps were taken for patent survey. However, there is some safety given the claims by the officially marked posts, which will lead many people to believe the claims are patented. Because the posts bear official survey numbers, is no sign that they are or are not patented; only inquiry at the local land office can develop this, though the surveyor-general does keep a list, and all patented claims are eventually listed by county recorders for the purpose of taxation. So far the applicant has not made any real steps toward patent; he has simply had his ground officially surveyed. He is under no compulsion to proceed further.

CHAPTER XVIII

Lode Patent—Application and Entry

The proceedings in the surveyor-general's office having closed, with the exception of where the \$500 expenditure has not yet been filed and approved, the second step—that of obtaining the patent proper—is now taken in the local land office. The applicant may begin the second step immediately upon the approval of his survey by the surveyor-general, or he may delay for years without losing any of the rights gained by the survey. The second step can only be taken on the survey by the applicant or his grantees. Anyone who may have located the ground in the event of the annual labor not having been performed, must have a new survey made.

Five copies of a notice of application for patent, containing a full description of the claim or claims, are prepared. One copy is posted at a conspicuous point on the claim or group included in the application, such as at the shaft, mouth of tunnel, boarding-house, or in a similar position. This posting is done in the presence of two disinterested witnesses, who make affidavit to the fact. The affidavits are attached to the second copy for filing in the land office as proof of posting. There is also posted with the notice on the claim, one of the plats delivered to the claimant by the surveyor-general. These are usually fastened inside of a box covered with a canvas flap, so that anyone is easily able to see them, and yet they are protected from the elements. They must remain posted during the sixty days of publication, and after removal are desirable to keep for reference, especially the plat. The third copy of the notice goes to the publisher of a newspaper published nearest the claim, to be published as an advertisement for a period of sixty days. If a weekly paper, nine consecutive insertions are required; if a daily, for sixty-one consecutive insertions. The

fourth copy is posted in the land office during the period of publication. A fifth copy is required by many land offices to send to the Government inspector.

The three notices of application for patent, one posted on the claims, one published in the newspaper nearest the claims, and one posted in the local land office, are notice to the world that application is being made for patent, and that all should govern themselves accordingly. That is, that those who claim the ground or any portion of it under another and adverse location, must file an adverse against the patent during the sixty days of publication (in Alaska the time has been extended to within eight months after the sixty days) or stand as having no claim to the ground. This is notice also that those who may have an ax to grind and wish to protest against the issuing of patent on ground that some law or requirement of weight has not been complied with, may do so up to date of issuing patent.

At the time the notices are being disposed of, the first set or 'application for patent' papers are filed in the local land office. They consist of, one of the final plats and the approved field notes delivered applicant by surveyor-general; the second copy of notice of application for patent with attached affidavits, being proof of posting notice on claim; the fourth copy of the notice, being the one posted in the land office; the fifth copy of the notice being the one to be forwarded to the local chief of field division by the local land office; the application for patent, or mineral application, which recites the facts and conditions and asks that patent be granted; a description of the vein or lode or mineral character of the land; an abstract of title showing full title in the applicant or applicants; proof that applicant or applicants are citizens of the United States; publisher's agreement that he will publish notice of application for patent and hold applicant alone responsible for charges; and the notice to be published. Together with this set of application papers, a filing fee of \$10 is paid. When this filing is made, an application number is given it. The surveyor-general, in approving the survey, approves all ground within the boundaries. The land office, in giving the application a number, removes from it all the conflicting ground of prior applications.

This makes it necessary for the application to adverse prior applications for any conflicting ground, but unnecessary to take steps against subsequent applications.

The second set or 'final entry' papers filed after expiration of period of publication, consist of, proof of continuous posting of plat and notice upon the ground during the sixty days of publication, made by affidavit of applicant; proof of publication of notice by affidavit of publisher; proof of payment of all charges and fees for publication, survey, land office fees, and purchase price of land, by affidavit of claimant; and application to purchase the land from the Government. On the presentation of the final entry set of papers, the register makes proof that notice of application for patent remained continuously posted in the land office during the sixty days of publication. If, during the period of publication, no adverse claim was filed against the application, and there are now no protests or other objections, applicant will be permitted to pay the purchase price of \$5 per acre for lode claims (\$2.50 for placer claims), and receive the receiver's receipt for the money. The certificate of final entry as a result of paying the purchase price, and the original of the receiver's receipt, is now added to the papers, and the whole record is forwarded to the General Land Office at Washington, where it is examined, and, if found regular, the patent document is issued and forwarded to the local land office, where the applicant receives it in exchange for his receiver's receipt, usually from six to eight months after final entry.

The \$500 expenditure as required by the Statute, may be made at any time before the expiration of the sixty-day period of publication. The filing of the surveyor's affidavit of the expenditure need not be done before the expiration of publication period. After filing of application for patent, and affidavit of expenditure if the same follows, a copy of the application is forwarded the chief of the local field division, who will have field examination made of the claim and entry. This examination is confined mainly to conditions found in the field, but will take up any question whatever relating to the entry. The conformity of the survey to the location in all its phases will be investigated. The nature of the survey will be examined,

lines may even be retraced. Whether the various details of patenting have been complied with; if the claims are essentially mineral land, taken up as *bona fide* mineral claims, and not for some other and unwarranted purpose; whether the necessary expenditure has been made; was it performed by the applicant or his grantors; whether it develops the claim as contemplated by law; whether the rights of other locators have been encroached upon, and similar matters, are investigated. While the miner must initiate and fight his own adverse cases, these examinations directly and indirectly give invaluable aid to miners whose rights are being or are liable to be encroached upon. They have a good moral effect in decreasing the tendency to fraud and underhand work by applicants, which the surveyors-general and General Land Office are unable to reach, and which only field investigations will reveal.

The reports of the mineral examiners and special agents are made to the Commissioner of the General Land Office, and are confidential. The patent proceedings usually progress without reference to these reports, but patent does not issue until they are received. If a report is adverse, and after having been considered by the General Land Office it is held that the charges are sufficient, if true, to warrant the rejection or cancellation of the entry or claim, a notice of the charges is served upon the entryman or claimant, who is allowed thirty days to file in the local land office a denial under oath of the charges, with an application for a hearing before the register and the receiver. The charges made in the adverse report are in the nature of a protest against the patent by the Government, and in the hearing of these charges must be supported for the Government by the special agent or examiner making them. The usual appeals from the decision of the register and receiver can be made to the Commissioner of the General Land Office and the Secretary of the Interior. Upon receipt of these charges the local land office will not allow entry, unless already made, until the protest is removed. If the claims for patent lie within a Forest Reserve, they will also be inspected by a local Forest Service officer. The purpose of this examination is to see that the claims are *bona fide* mining claims and not taken

up as a cloak to fraudulently secure land for other purposes, also that the allowance of patent will not prejudice the interests of the National Forests.

CHAPTER XIX

Patent—Placer, Known Lodes Within Placers, Millsites

The subject of placers and known lodes within placers, together with the Statutes governing, has been treated at length under the headings 'Placer Location' and 'Lodes Within Placers.' Likewise, the subject of millsites has been treated under 'Millsite Location.' The Land Office regulation 59 says, concerning patents on placer claims, "the proceedings for obtaining patents for veins or lodes having already been fully given, it will not be necessary to repeat them here, it being thought that careful attention thereto by applicants and the local officers will enable them to act understandingly in the matter, and make such slight modifications in the notice, or otherwise, as may be necessary in view of the different nature of the two classes of claims."

Placer claims upon surveyed land and conforming to the public-land surveys, require no survey nor any proceedings in the surveyor-general's office. Claims not upon surveyed land or not conforming to the legal subdivisions when upon surveyed land, are required to be surveyed by a deputy mineral surveyor under proceedings similar to the case of lode claims. Claims of the first class, when described by legal subdivisions, may be entered at once in the local land office for patent, after which the proceedings in both cases are practically the same as with lode claims.

"In placer locations, in addition to the recitals necessary in and to both vein or lode and placer applications, the placer application should contain, in detail, such data as will support the claim that the land applied for is placer ground containing valuable mineral deposits not in vein or lode formation, and that title is sought not to control watercourses or to obtain valuable timber, but in good faith because of the mineral therein. This statement, of course, must depend upon the character of

the deposit and the natural features of the ground, but the following details should be covered as fully as possible: If the claim be for a deposit of placer gold, there must be stated the yield per pan, or cubic yard, as shown by prospecting and development work, distance to bedrock, formation and extent of the deposit, and all other facts upon which he bases his allegation that the claim is valuable for its deposits of placer gold. If it be a building stone or other deposit than gold claimed under the placer laws, he must describe fully the kind, nature, and extent of the deposit, stating the reasons why same is by him regarded as a valuable mineral claim. He will also be required to describe fully the natural features of the claim; streams, if any, must be fully described as to their course, amount of water carried, fall within the claim; and he must state kind and amount of timber and other vegetation thereon and adaptability to mining or other uses. If the claim be all placer ground, that fact must be stated in the application and corroborated by accompanying proofs; if of mixed placers and lodes, it should be so set out, with a description of all known lodes situated within the boundaries of the claim. A specific declaration, such as is required by section 2333, Revised Statutes, must be furnished as to each lode intended to be claimed. All other known lodes are, by the silence of the applicant, excluded by law from all claim by him, of whatsoever nature, possessory or otherwise. While this data is required as a part of the mineral surveyor's report under paragraph 167, in case of placers taken by special survey, it is proper that the application for patent incorporate these facts under the oath of the claimant. Inasmuch as in case of claims taken by legal subdivisions, no report by a mineral surveyor is required, the claimant, in his application in addition to the data above required, should describe in detail the shafts, cuts, tunnels, or other workings claimed as improvements, giving their dimensions, value, and the course and distance thereof to the nearest corner of the public surveys. As prescribed by paragraph 25, this statement as to the description and value of the improvements [the \$500 expenditure for patent purposes] must be cor-

roborated by the affidavits of two disinterested witnesses." (*Land Office regulation 60.*)

Where the claim must be surveyed for patent, the deputy mineral surveyor must make a report in accordance with regulation 167 of the Land Department:

"Mineral surveyors are required to make full examinations of all placer claims at the time of the survey, and file with the field notes a descriptive report, in which will be described: (a) The quality and composition of the soil, and the kind and amount of timber and other vegetation. (b) The locus and size of streams, and such other matter as may appear upon the surface of the claims. (c) The character and extent of all surface and underground workings, whether placer or lode, for mining purposes, locating and describing them. (d) The proximity of centres of trade or residence. (e) The proximity of well known systems of lode deposits or of individual lodes. (f) The use or adaptability of the claim for placer mining, and whether water has been brought upon it in sufficient quantity to mine the same, or whether it can be procured for that purpose. (g) What works or expenditures have been made by the claimant or his grantors for the development of the claim, and their situation and location with respect to the same as applied for. (h) The true situation of all mines, salt licks, salt springs, and millsites which come to the surveyor's knowledge, or a report by him that none exist on the claim, as the facts may warrant. (i) Said report must be made under oath and duly corroborated by one or more disinterested persons."

A placer claim requires improvements to the amount of \$500 before being patented, just as in the case of lode claims. A single claim of 160 acres requires only \$500 worth of work, just as a smaller claim of 20 acres would. Affidavit of the expenditure is made by the deputy mineral surveyor who surveys the claim for patent, or in case of a claim by legal subdivisions and without patent survey, the affidavit of expenditure may consist of the affidavit of two or more disinterested witnesses.

Known lodes within placer claims may be patented by any one locating them, whether the owner of the placer ground or

otherwise. To patent a known lode within a placer requires survey and entry just as with any other lode claim, with the exception that where the land has already been applied for or patented as a placer claim without excluding the lode, a hearing will be held in the local land office to determine if the lode is a known lode as contemplated by the Statute, and therefore impliedly reserved from the placer patent by the Statute for the benefit of whoever may locate it.

No special conditions enter into the patenting of a millsite. Those attached to a lode claim may be entered with the lode claim or subsequently; they may even be located after the lode claim is patented. While no \$500 expenditure is required upon a millsite claim, those attached to a lode claim require to be used for some mining and milling purpose in connection with the lode claim, and those unattached to the lode claim, to have an actual reduction works upon them.

CHAPTER XX

Adverse Claim

R. S., Sec. 2325. * * * If no adverse claim shall have been filed with the register and the receiver of the proper land office at the expiration of the sixty days of publication, it shall be assumed that the applicant is entitled to a patent, upon the payment to the proper officer of five dollars per acre, and that no adverse claim exists; and thereafter no objection from third parties to the issuance of a patent shall be heard, except it be shown that the applicant has failed to comply with the terms of this chapter.

R. S., Sec. 2326. When an adverse claim is filed during the period of publication, it shall be upon the oath of the person or persons making the same, and shall show the nature, boundaries, and extent of such adverse claim; and all proceedings, except the publication of notice and making and filing of the affidavit thereof, shall be stayed until the controversy shall have been settled or decided by a court of competent jurisdiction, or the adverse claim waived. It shall be the duty of the adverse claimant, within thirty days after filing his claim, to commence proceedings in a court of competent jurisdiction, to determine the question of the right of possession, and prosecute the same with reasonable diligence to final judgment; and a failure so to do shall be a waiver of his adverse claim. After such judgment shall have been rendered, the party entitled to the possession of the claim, or any portion thereof, may, without giving further notice, file a certified copy of the judgment-roll with the register of the land office, together with the certificate of the surveyor-general that the requisite amount of labor has been expended or improvements made thereon, and the description required in other cases, and shall pay to the receiver five dollars per acre for his claim, together with the proper fees, whereupon the whole proceedings and the judgment-roll shall be certified by the register to the Commissioner of the General Land Office, and a patent shall issue thereon for the claim, or such

portion thereof as the applicant shall appear, from the decision of the court, to rightly possess. If it appears from the decision of the court that several parties are entitled to separate and different portions of the claim, each party may pay for his portion of the claim with the proper fees, and file the certificate and description by the surveyor-general, whereupon the register shall certify the proceedings and judgment-roll to the Commissioner of the General Land Office, as in the preceding case, and patents shall issue to the several parties according to their respective rights. Nothing herein contained shall be construed to prevent the alienation of a title conveyed by a patent for a mining claim to any person whatever.

An adverse claim is the assertion of rights in all or any part of the ground embraced in an application for patent, under another and hostile location to the one entered for patent. It is by filing an adverse claim against the application for patent, that the miner retains his unpatented ground that has been 'jumped' or overlapped. The adverse as prepared must fully set forth the nature and extent of the interference and conflict. It should contain all the facts by which the adversary claims the right to adverse. Accompanying must be a plat showing the claims and conflict, but such survey may be made by a surveyor other than a deputy mineral surveyor. If it is impossible to survey the conflict through the claims being snow-bound, the same should be stated. If both the patent application and adverse are by legal subdivisions, no survey or plat is required. The adverse will be made on the oath of the adverse claimant, or his duly authorized agent or attorney in fact cognizant of the facts. The adverse must be filed in the local land office where the patent application is filed, during the sixty days of publication of notice of application for patent, not including the first day of publication. No adverse claim can be received under any conditions after this period. If re-publication is ordered, the adverse must be re-filed. An adverse cannot be enlarged through amendment or a new adverse, after the publication period. If the local land office rejects the adverse as being insufficient, the adversary may appeal to the Commissioner of the General Land Office at Washington, but unless

he brings suit in the courts within thirty days, just as if his adverse had been accepted at the local land office, the allowance of his adverse at Washington will not avail him. Even though the land office rejects an adverse claim, if the adverse claim is carried through regularly in every other way, the land office will respect the court decision, for should the court decision be favorable to the adverse claimant, it would tend to show that the land office was in error in not accepting the adverse.

The Government wisely avoids trying to determine the possessory rights of rival claimants by requiring that the adverse claimant bring suit within thirty days from date of filing adverse, in a court of competent jurisdiction to determine the question of right of possession. If suit is not commenced within this time and prosecuted with reasonable diligence, the right of adverse is lost. An Act was passed by Congress in 1910 authorizing in Alaska, the filing of adverse claims at any time during the sixty days of publication or within eight months thereafter, and adverse suits to be instituted within sixty days after filing the adverse claims in the local land office. This Act was necessitated by the fact that travel and communication are almost suspended in parts of Alaska during the winter season.

The filing of adverse claims against a patent does not stay the patent proceeding until after the completion of the publication and posting of notices and plat and the filing of the necessary proof thereof, when the matter must be rested, until the land office is able to determine from the outcome in court of the adverse cases, to what land entry should be allowed. After filing the result of the court proceedings, whether non-suit, abandonment, dismissal, or judgment, the patent application as modified by the results of the adverse suit, will proceed in the regular way. Whatever ground is awarded the adverse claimant is, of course, removed from the patent application before final entry. The adverse claimant may also file the necessary patent papers and receive patent for any area awarded him, whether part or all, if he has done the requisite \$500 worth of work. Should the adverse claimant wish to patent all of the claim of which the awarded area may be a part, he will have to begin new and regular patent proceedings, including survey.

If the judgment of the court is that neither party is entitled to the ground, no further proceedings can be made on the patent application.

An adverse claim may be filed against any kind of a mineral entry by another mineral location, whether of the same class or not; though where the classes of locations are at variance, the adverse may take on the nature of a protest, as in the case of a lode claim adverseing a millsite and questioning its non-mineral character. Claimants under filings or entries other than mineral, instead of adverseing mineral applications, protest against them. A co-owner who has been excluded from the application for patent by the co-owners, may adverse in his own behalf, but his adverse is more in the nature of a protest (see 'Protest').

The ground which is the subject of an adverse may be excluded from the patent application, that it may at once proceed to final entry and patent, without any rights to the ground in conflict being waived. An agreement made by a patent applicant to deed certain portions of the claim or rights, after patent has been obtained, to those threatening to adverse in consideration of no adverse being made, is sound and valid.

A lode must adverse a lode, a placer must adverse a placer, and a millsite must adverse a millsite, or lose all rights to the ground in conflict. A placer must adverse a lode or lose the conflict area. A lode must adverse a placer or lose all except 25 feet on each side of the known lode, it being protected to that extent by the Statute on known lodes in placers. Known lodes need not adverse placers, but it is best to do so. Tunnel sites need not adverse on blind lodes cut, except where it is desired to patent surface ground on such blind lodes. Lodes or placers should adverse a millsite, but may also, and more properly, protest. A millsite should adverse a lode or placer, though it may also, and more properly, protest. A co-owner may adverse, but more properly protests.

CHAPTER XXI

Protest

R. S., Sec. 2325. * * * And thereafter [after publication period] no objection from third parties to the issuance of a patent shall be heard, except it be shown that the applicant has failed to comply with the terms of this chapter [the mining Statutes and presuming the regulations of the Land Department].

"At any time prior to the issuance of patent, protest may be filed against the patenting of the claim as applied for, upon any ground tending to show that the applicant has failed to comply with the law, in any matter essential to a valid entry under the patent proceedings. Such protest cannot, however, be made the means of preserving a surface conflict lost by failure to adverse, or lost by the judgment of the court in an adverse suit. One holding a present joint interest in a mineral location included in an application for patent, who is excluded from the application, so that his interest would not be protected by the issue of patent thereon, may protest against the issuance of a patent as applied for, setting forth in such protest the nature and extent of his interest in such location, and such a protestant will be deemed a party in interest entitled to appeal. This results from the holding that a co-owner excluded from an application for patent, does not have an 'adverse' claim within the meaning of sections 2325 and 2326 of the Revised Statutes. (See *Turner v. Sawyer*, 150 U. S., 578-586.)"—(*Land Office regulation* 53.)

A protest differs from an adverse in that while an adverse is a question of the possessory rights of rival claimants and a subject of interest to the two contending parties only, a protest questions the applicant's right to receive title through not having complied with the Statutes or regulations and in its being against

the public policy and intention. A protest is prepared as the affidavit of the protestant, setting forth the reasons why patent should not be allowed. It is filed in the local land office at any time after publication of notice of application for patent begins, and up to the date of issuing patent at Washington. A protest filed after the patent document has actually issued, though it has not been delivered to the applicant, cannot be acted upon. The only recourse is to have the Government begin suit to set aside patent on grounds of fraud, if the facts will warrant such a suit. The result of a protest, if the patent applicant wishes to deny the charges and cannot do so otherwise, is a hearing before the register and receiver of the local land office, in which the protestant and the patent applicant will be heard and a decision will be made. Protests may be made by anyone, whether claiming to hold rights in the ground upon which patent is being asked, or not. Parties claiming an interest in the ground, adversely or otherwise, have the right to appeal from the decision of the local land office to the Commissioner of the General Land Office, and from his decision to the Secretary of the Interior. Protestants without interest in the property have no such right of appeal.

Protests are of three classes: (1) Those claiming that the mineral laws and regulations have not been fully complied with to entitle applicant to patent; (2) those claiming that the land is not such as to be patented as mineral entries or the class of mineral entry made; (3) those made by a co-owner who has been excluded from the patent application by the other co-owners.

A protest of the first class does not deny that the land is subject to the kind of entry made, but asserts that the patent applicant, not having complied with some law or regulation relative to patenting, should have his application rejected. If the protest is sustained, the patent proceedings will be cancelled in whole or part, but the applicant's possessory right is not impaired, neither is he hindered from beginning his application anew or continuing it to patent, by complying with the law. Such a protest may be, that the applicant is not a citizen of the United States, that the notice of application for patent was not properly posted, that the required amount of work has not

been done, that there is no mineral discovery, that the patent survey did not keep within the location, or any similar objection may be urged. Theoretically, any departure from the Statutes or the regulations of the General Land Office might constitute sufficient basis for a protest, but some of the Land Office rules must be considered as directory rather than mandatory, and consequently every trifling defect is not a sufficient basis for a protest. It must be a thing of some weight.

Protests of the second class assert that the land is more valuable for some other purpose, or is not essentially of the class to be secured by such entry. These occur when the mineral character of a lode claim or the non-mineral character of a millsite is questioned. They are a frequent occurrence between agricultural entrymen and mineral applicants or locators. The decision in a hearing on one of these protests usually operates to cancel the possessory right or entry of the losing claimant.

Protests of the third class, or those made by a co-owner excluded from the application for patent by the other co-owners, if successfully sustained, will cause the protestant to be included in the application for patent to the extent of his portion. If patent is already issued, the excluded co-owner should begin suit in law to have his portion or right in the patent transferred to him. An excluded co-owner may file an adverse in the usual way, which will stay patent proceedings until his rights can be litigated in court. The Land Office regulation, quoted at the beginning of the chapter, assumes that such a co-owner is a protestant rather than an adverse claimant. This appears to be the proper view, since the Statute referring to adverse claims is designed to cover questions of conflicting and hostile locations, not difficulties between co-owners. Furthermore, the co-owner technically protests that the patent applicant has not the full possessory right necessary to entitle him to patent as contemplated by law. However, the better course is for the excluded co-owner to both adverse and protest.

A protest cannot be made on any grounds that were properly the subject of an adverse. No rights that could have been retained by an adverse can be directly saved by a protest. However, when a claimant has lost his rights, through failing to

adverse at the proper time, if he can unearth some point on which to protest and can successfully sustain the protest, he will have a chance to adverse and preserve his rights when the patent applicant makes application anew or on re-publication. This is the most important point for the miner to bear in mind. A relocater of a claim, basing his right on failure to do the annual labor, after the publication period, as often happens where the applicant unnecessarily delays making final entry, protests against the final entry and patent, since he cannot adverse.

CHAPTER XXII

Patent Work

R. S., Sec. 2325. * * * The claimant, at the time of filing this application, or at any time thereafter, within the sixty days of publication [of notice of application for patent], shall file with the register a certificate of the United States surveyor-general that \$500 worth of labor has been expended or improvements made, upon the claim by himself or grantors * * *

"If the application embraces several contiguous locations held in common, that an amount equal to \$500 for each location, has been so expended upon and for the benefit of the entire group. The expenditures required may be made from the surface, or in running a tunnel, drifts, or cross-cuts for the development of the claim. Improvements of any other character, such as buildings, machinery, or roadways, must be excluded from the estimate, unless it is shown clearly that they are associated with actual excavations, such as cuts, tunnels, shafts, etc., are essential to the practical development of, and actually facilitate the extraction of, mineral from the claim. Improvements made by a former locator who has abandoned his claim cannot be included in the estimate, but should be described and located in the notes and plat. If the value of the labor and improvements upon a mineral claim is less than \$500 at the time of survey, the mineral surveyor may file with the surveyor-general supplemental proof showing \$500 expenditure made prior to the expiration of the period of publication." (*Land Office regulations 48, 157, 158, and 160.*)

The patent work, as has been stated before, may be performed any time prior to expiration of publication period, and may be measured up and reported to the surveyor-general and land office after that period; usually it is work that was intermit-

tently performed as the annual labor. It has been generally stated that annual labor and patent work are the same, but there is liable to be considerable difference between the two. What will answer as patent work is satisfactory for annual labor, but not necessarily the reverse. As the Land Office does not determine possessory rights, it has nothing to do with annual labor, and consequently, what is annual labor must be obtained from the decisions of the courts, when such work has been questioned. What will answer as patent work must be judged from the regulations and decisions of the Land Office. While the Statutes undoubtedly contemplated that annual labor and patent work should be the same, there is an essential fairness in their differences. The miner and prospector, often a man of little means, who spends his time and money building a cabin, trails, etc., and making other preparatory steps which indirectly assist him in developing the mineral in his claim, is entitled to apply the same as annual labor, and the courts allow him to do so in the presence of *bona fide* intention and good faith. Nevertheless, the Land Office is right in requiring, when patent is asked for a claim, that the \$500 expenditure shall directly, and not indirectly, tend to develop the mineral contents of the ground and facilitate its extraction therefrom. It should be work tending to open up the ground and leave some trace of itself, such as cuts, tunnels, shafts, or quarries; in short, actual development operations. About the only things that will be allowed in the line of buildings are shaft-houses and head-frames, since they are directly required in extracting mineral. Blacksmith-shops are generally rejected, and other constructions still more certainly. Roads and trails upon the actual ground of the claims have been accepted where associated with actual excavations, but there is a probability of their being barred in the future. Expenditures for reduction works, watchmen, pumping water, surveying where not a part of an improvement, etc., are not applicable. Caved works may be applied, if clear and convincing proof of their existence can be established.

Where and how the work must be done is answerable in the same way as in the case of annual labor. It must tend to develop the claims. Whether it does or not is a question of

fact. The work may be a common improvement for any number of contiguous claims, and also for claims that are not contiguous, if the common improvement will develop these claims and has right-of-way. A single exception is the case of oil claims, where, under the Statute, an improvement upon one claim cannot answer as annual labor on more than five contiguous claims having a common ownership. There is nothing to say how close a claim must be situated to a shaft or tunnel to entitle it to go to patent on that improvement. Whether the shaft or tunnel could be considered a development of that claim, would be a question in which the ideas of practical miners and engineers would prevail. A tunnel would not be an improvement of a claim located farther down the hill and below the tunnel portal. A tunnel is not an improvement of a claim which it could not reach through its bore or in case a drift from it in the direction of the claim would come to daylight before reaching the claim.

If a claim of a group has \$500 worth of work done upon it in what is to be a common improvement for the group, it may go to patent; the fact that the \$500 has been applied as annual labor to benefit all the claims is of no weight. After performing another \$500 worth of work in the common improvement, the next claim can be patented, and so on. Where a claim is added to an existing and patented group by location or purchase, the newly added claim may be patented by doing \$500 worth of work for it in the common improvement, if such improvement can be considered a development of the new claim. This is an important point, for it was formerly held that if it was desired to patent, on a common improvement, a claim added by the location, it would be necessary to perform in the common improvement, after adding the new claim, such an amount of work as, divided by the total number of claims purported to be developed by the common improvement, would give the \$500 for the new claim.

The valuation of the work, like with annual labor, is what it is reasonably worth. What it actually cost, whether high or low, has little weight. The work must be performed by the applicant or his grantors. Work existing upon the claims when located cannot be entered, except by fraud; for the appli-

cant must make oath that work entered was performed by himself or grantors. Where the claimant relocates his claim to prevent others from locating it through his failure to do the annual labor, it is believed, though there is no decision or ruling on that point, that he has lost all prior work for patent purpose. It may be said in favor of the claimant, when making his patent application, that he has actually performed the work he reports, and if there has been no intervening location, and his relocation being more a nominal location, his rights date back to the first location on the principle of resuming work. Against him is the \$500 expenditure implying that the work must be done on the location entered for patent, and not under a former location; also, that he should be penalized for trying to avoid annual labor by losing for patent purposes the work which he relocated. If the forfeiting owner has the right to relocate his own ground just as a stranger would have, as the court held in one case reported, then he should have no patent rights to his old work, just as a stranger would not. At any rate, the claimant should resume work on his forfeitable location instead of relocating; he should make amended locations instead of relocations, whenever defects or changes of location are to be adjusted.

CHAPTER XXIII

Apex or Extralateral Right

R. S., Sec. 2322. The locators of all mining locations * * * shall have the exclusive right of possession and enjoyment of all the surface included within the lines of their locations, and of all veins, lodes, and ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of such surface locations. But their right of possession to such outside parts of such veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as above described, through the end lines of their locations, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges. And nothing in this section shall authorize the locator or possessor of a vein or lode which extends in its downward course beyond the vertical lines of his claim to enter upon the surface of a claim owned or possessed by another.

The above is the Statute upon which the law of apex, extralateral or subsurface right is based. There is no other Statute and no other law upon the subject, except the decisions rendered in apex suits.

The apex of a vein may be defined as the top; the upper end, edge, or beginning; the outcrop of the vein on or nearest the surface. It is not a point, as a strict interpretation of the word apex might indicate, but a line, which, if it does not outcrop on the surface, would do so if the overlying earth and rock were sufficiently removed—that is, a blind vein has a legal apex. The apex is the top or outcrop of the vein along the strike, and more or less at right angles to the dip; it is not the outcrop on the dip. It is the exposed or uppermost edge of the strike, not that of the dip.

The apex law or right to follow the vein indefinitely on its dip, was originated and put into practice by the miner, who believed that the discoverer of a vein on the surface, was entitled to all of the vein in depth as his reward; also, that if the right to follow the vein in depth was not granted him, he would of necessity have to appropriate a large amount of ground on each side of the outcrop or apex of the vein, in order to insure his possession of the vein in depth, which would work a hardship on him in trying to hold the ground and on others in preventing them from prospecting this additional area. At the time the law was originated, the 'true-fissure' type of quartz vein was the prominent and ruling type of orebody known. Such a vein occupies a fairly regular fissure in the earth, and is comparatively clear cut and well defined. It may be likened to a leaf within a book. If all veins or lodes were of this type, the wisdom of the apex law would be unquestioned. As mining progressed, it was found that ore deposits departed more and more from the theoretical idea of a vein or lode upon which the law was founded, especially in the case of base-metal veins and lodes, and impregnation and replacement deposits. The questions that arose regarding the apex law were of two classes. The first question was, who had the apex according to the geologic facts? The Statutes, it was soon evident, had made no provision for the varying conditions under which apexes and claim-lines were found. Having determined the geologic facts as to who had the apex, what decision should be handed down, became the second question. The second question, one of law, has been answered by the various court decisions covering most of the forms of apex and claim-line occurrence, so that if the facts of the apex are established, the law can be applied. The first question, what are the conditions under which the vein or lode occurs and who has the apex, the question of fact, can only be determined by geologic investigation and engineering work, and is the more difficult point in all apex suits.

Both practical and technical men are divided in their opinion upon the apex law. Given an entirely new country, the majority, biased by the great amount of litigation caused by the apex

law in the past, would undoubtedly decide against it; but under our present conditions, it would appear that the majority are in favor of its continuance, since to disallow apex rights to all future locations would cause endless confusion and dissatisfaction. Should the apex law be repealed, those claims located prior to such repeal could not be divested of their apex rights. In 1905 the Philippine Mining Laws were amended by the Congress of the United States to prohibit apex or extralateral rights.

The substance of the apex law is that if the end-lines are parallel to each other, and straight and unbroken, the vein may be followed indefinitely on its dip outside of the side lines of the claim; but only such part of the vein may be followed as lies within the end lines and the prolongations of the end lines on the surface, when such end lines and their prolongations are projected vertically downward toward the centre of the earth. The parallelism of end lines is not required to secure extralateral rights on patents issued before 1872, but unless the end lines are parallel on locations and patents since the present Act of 1872, there are no extralateral rights. In the cases to be illustrated, it will be presumed that the end lines are parallel in each instance.

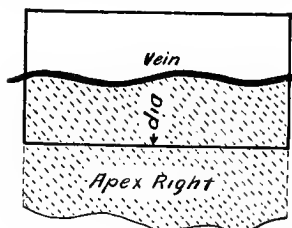


Fig. 19

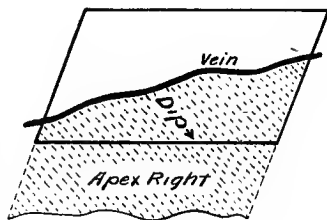


Fig. 20

Fig. 19 and 20 represent the apex rights in a claim where the vein crosses both end lines as the law contemplates. It is the condition for which the apex law was framed, the other rules of the apex law having been made by the decisions of

the courts. Where the vein crosses both side lines, the vein cannot be followed beyond the side lines in a way consistent with the intention of the apex law, since that would generally be a case of following the vein on its strike, instead of its dip. For this reason, the end lines become the side lines, and the side lines become the end lines. If the intended side lines are parallel, extralateral rights occur as in Fig. 21 and 22;

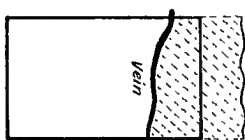


Fig. 21

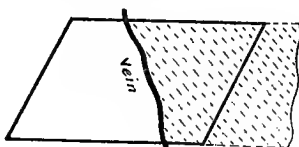


Fig. 22

hence the advisability of always making the side lines parallel. When the vein crosses one side line and one end line, the end lines still remain the end lines for extralateral right purposes. The right to follow the vein beyond the side lines is confined to the part of the vein which apexes within the claim, and ends where the vein crosses the side line as shown in Fig. 23 and 24. In case a vein crosses an end line and terminates

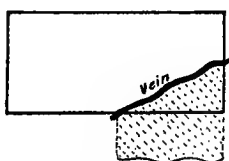


Fig. 23

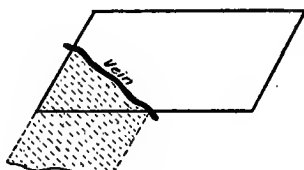


Fig. 24

within the claim, the rights are as in Fig. 25. An application of this principle would lead, in the case of a vein crossing a side line and terminating within the claim, to the rights shown in Fig. 26; and in the case of a vein or orebody having both

of its terminations within the claim, to those rights shown in Fig. 27 and 28.

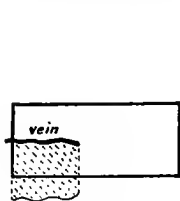


Fig. 25

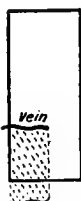


Fig. 26

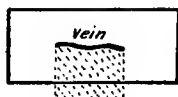


Fig. 27



Fig. 28

In Fig. 29 the question is, who would have the dip rights not obtained by *A* and *B*—the ground lying between? It would probably go to the owner of *C*, who, although not having any of the true apex of the vein, would have a theoretical apex between *A* and *B* along *DE* *F*, where the apex rights of *A* and *B* terminate by reason of the direction of their end lines.

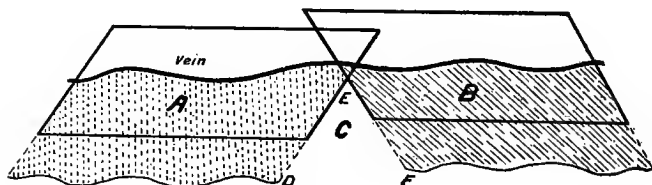


Fig. 29

In the previous cases it is the 'principal', the 'discovery', or 'original' vein that is discussed. The question then comes, what are the rights on another or secondary vein apexing in the same claim? Shall its rights be decided by its own facts, or shall they be contingent upon the facts and rights of the discovery or original vein? It appears that they will be contingent upon the discovery or original vein, in so far as such discovery vein determines which shall be the end lines and which the side lines for apex purposes; but as a pronounced

following of the secondary vein on its dip would be obnoxious, except conformable to the main workings, there would be no apex rights on a secondary vein that did not dip in harmony with its discovery or principal vein.

Where a broad vein apexes in breadth, partly upon each of two adjoining claims, that is, when the joint boundary line of the claims splits the apex, the extralateral rights go to the senior locator. The locator has the right to follow the vein to which he has extralateral rights, into the ground of all mineral locations and entries, whether patented or unpatented, whether of an earlier or a later location than his own; but he must follow the vein from his own ground. The Statute quoted before grants him no right to sink, tunnel, or drift through his neighbor's ground, to locate or cut his own vein, but it would appear that this right can be acquired in most States under condemnation or eminent domain proceedings. When land has been entered or patented as agricultural or other nonmineral ground, all mineral eventually found within the boundaries extended vertically downward belongs to the agricultural owner, but there are no apex rights, and the owner cannot follow any vein outside his vertical boundaries, for the Statutes give that right only to "the locators of mining locations" on such locations.

It is presumed that the miner may locate the theoretical apex where the vein dips out of the agricultural patent on its downward course, and obtain apex rights, for it is held that, for the purpose of exploration, discovery, and purchase, the legal apex of a vein that dips out of ground disposed of under the placer or nonmineral laws is that portion of the vein within the public lands which would constitute its actual apex if the vein had no actual existence in the ground disposed of. An agricultural entry on public land is made subject to any accrued rights, and consequently the vein of a location older than the agricultural entry or patent, may be followed into the agricultural land. A location made subsequent to the issuance of agricultural patent confers no right to follow its vein into the agricultural ground, but the status of a piece of agricultural land between the time the first rights were initiated

on it under the agricultural land laws and the time of making final proof and receiving the receiver's receipt preliminary to the issuing of patent is not known; apparently, any location made before the issuance of the receiver's receipt would have extralateral rights into the agricultural land.

The apex rights of a blanket or flat vein depend upon how clear is the proof of the vein dipping. Apex rights are not allowed on the outcrop of the dip, only on the apex or outcrop of the strike. It is usually hard, in the case of flat veins, to say what is the strike and what is the dip, and in such cases no apex rights are allowed. Speaking generally, there must be a substantial dip before apex rights will be allowed. How much dip is required cannot be said. Deposits which require to be located as placers have no apex rights. Known lodes in placers have dip rights, but other lodes in placers have not.

Intersecting and Uniting Veins

R. S., Sec. 2336. Where two or more veins intersect or cross each other, priority of title shall govern, and such prior location shall be entitled to all ore or mineral contained within the space of intersection; but the subsequent location shall have the right of way through the space of intersection, for the purposes of the convenient working of the mine. And where two or more veins unite, the oldest or prior location shall take the vein below the point of union, including all the space of intersection.

The above needs no explanation. The same rules govern in

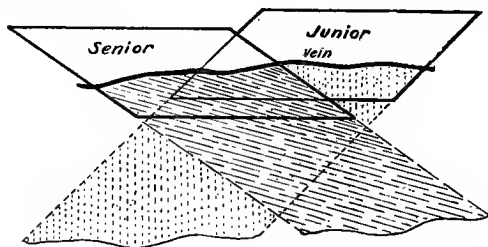


Fig. 30

the conflict of apex rights as shown in Fig. 30, where the senior location takes the part of the vein in conflict, while the junior location has the right to pass through the conflict area to its part of the vein beyond. Fig. 31 shows the case

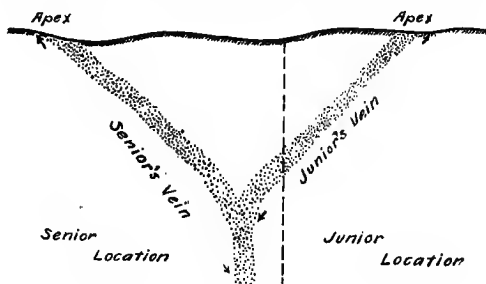


Fig. 31

of two veins uniting in depth. Claimants under each location may follow the vein apexing in its ground until they unite to continue as one vein, when the senior locator has all the rights to this one vein as it continues in depth.

CHAPTER XXIV

Coal Land

R. S., Sec. 2347. Every person above the age of twenty-one years, who is a citizen of the United States, or who has declared his intention to become such, or any association of persons severally qualified as above, shall, upon application to the register of the proper land office, have the right to enter, by legal subdivisions, any quantity of vacant coal lands of the United States not otherwise appropriated or reserved by competent authority, not exceeding one hundred and sixty acres to such individual person, or three hundred and twenty acres to such association, upon payment to the receiver of not less than ten dollars per acre for such lands, where the same shall be situated more than fifteen miles from any completed railroad, and not less than twenty dollars per acre for such lands as shall be within fifteen miles of such road.

R. S., Sec. 2348. Any person or association of persons severally qualified, as above provided, who have opened and improved, or shall hereafter open and improve, any coal mine or mines upon the public lands, and shall be in actual possession of the same, shall be entitled to a preference right of entry, under the preceding section, of the mines so opened and improved; provided, that when any association of not less than four persons severally qualified as above specified, shall have expended not less than five thousand dollars in working and improving any such mine or mines, such association may enter not exceeding six hundred and forty acres, including such mining improvements.

R. S., Sec. 2349. All claims under the preceding section must be presented to the register of the proper land district within sixty days after the date of actual possession and the commencement of improvements on the land, by the filing of a declaratory statement therefor; but when the township plat is not on file at the date of such improvement, filing must be made within sixty days from the receipt of such plat at the district office; and where the improvements shall have been

made prior to the expiration of three months from the third day of March, 1873, sixty days from the expiration of such three months shall be allowed for the filing of a declaratory statement, and no sale under the provisions of this section shall be allowed until the expiration of six months from the third day of March, 1873.

R. S., Sec. 2350. The three preceding sections shall be held to authorize only one entry by the same person or association of persons; and no association of persons, any member of which shall have taken the benefit of such sections, either as an individual or as a member of any other association, shall enter or hold any other lands under the provisions thereof; and no member of any association which shall have taken the benefit of such sections, shall enter or hold any other lands under their provisions; and all persons claiming under section 2348 shall be required to prove their respective rights and pay for the lands filed upon, within one year from the time prescribed for filing their respective claims; and upon failure to file the proper notice, or pay for the land within the required period, the same shall be subject to entry by any other qualified applicant.

R. S., Sec. 2351. In case of conflicting claims upon coal lands, where the improvements shall be commenced after the third day of March, 1873, priority of possession and improvement, followed by proper filing and continued good faith, shall determine the preference right to purchase. And also, where improvements have already been made prior to the third day of March, 1873, division of the land claimed may be made by legal subdivisions, to include, as near as may be, the valuable improvements of the respective parties. The Commissioner of the General Land Office is authorized to issue all needful rules and regulations for carrying into effect the provisions of this and the four preceding sections.

R. S., Sec. 2352. Nothing in the five preceding sections shall be construed to destroy or impair any rights which may have attached prior to the third day of March, 1873, or to authorize the sale of lands valuable for mines of gold, silver, or copper.

The above are the Federal Statutes relating to the sale of coal lands in the United States; they, with some amendments which will not be treated herein, have been extended to Alaska. An individual over twenty-one years of age, who is a citizen of the United States, or has announced his intention to become

such, may, enter not to exceed 160 acres of coal land. An association of persons or a corporation may enter 320 acres. An association or corporation of not less than four persons, who have expended not less than \$5,000 in working and improving their mines, may enter not to exceed 640 acres. The right to enter coal lands may be exercised once only, whether as an individual or as a member of an association or corporation, no matter if the entry is of the maximum size or less. No corporation or association which contains a member who has exercised his right individually or as an association member may make an entry. The minimum price is \$10 per acre for coal lands more than fifteen miles from a completed railroad, and \$20 per acre when within that distance.

Two methods of purchasing coal lands are provided. The first is by what is known as a 'cash entry.' The procedure is to file an application in the local land office by legal subdivisions, consequently it can be made upon surveyed land only. The application is published in a newspaper nearest the land; it is also posted in a conspicuous spot on the land and in the land office, as a notice to those who may wish to adverse or protest. Thirty days of posting and publication are required. Within thirty days of the expiration of publication period, applicant must file proofs of publication and posting, and tender the purchase price of the land, resulting eventually in patent to the land.

The second method of purchase is by initiating and maintaining a 'preference right of entry' to be followed by a cash entry. The applicant initiates a preference right of entry by beginning improvements upon the land, which must be actual *bona fide* work and open up a mine or mines of coal. To maintain and preserve a preference right of entry, the applicant must, within sixty days of exposing coal and beginning its improvement, if upon surveyed land, or if upon unsurveyed land then within sixty days of the filing of township plat in the local land office, file a declaratory statement in the local land office. The declaratory statement is to the effect that applicant has entered upon the land, begun improvements, and intends to purchase the land. Within one year after the expira-

tion of the period for filing the declaratory statement, the applicant must file application to purchase land and thereafter proceed as in the case of a cash entry. Applicants for coal lands that are unsurveyed may secure the surveys necessary for entry through application to the surveyor-general.

Up to July 1906 coal lands were disposed of at the minimum price of \$10 and \$20 per acre. At that date and since, large areas reported to contain coal have been withdrawn from all forms of entry. These withdrawn areas have been or are being classified by the United States Geological Survey through field examination into coal and noncoal lands, and restored to entry as fast as possible. Those classified as coal lands were formerly subject to such entry only, excepting mineral locations for other minerals, and at the valuation per acre placed upon them by the Geological Survey. They may now be filed upon for coal at the valuation set, or the surface only obtained by an agricultural entry relinquishing the coal to the Government, which may dispose of it to other parties.

The basis of the valuation made by the Geological Survey is contained in the 'Regulations regarding the classification and valuation of coal lands, as approved to June 6, 1910, by the Secretary of the Interior,' as follows:

(1) For the purposes of classification and valuation, coal deposits shall be divided into four classes: (a) Anthracite, semi-anthracite, coking, and blacksmithing coals; (b) high-grade bituminous noncoking coals having a fuel value of not less than 12,000 B.T.U. on an unweathered air-dried sample; (c) bituminous coals having a fuel value of less than 12,000 B.T.U. on an unweathered air-dried sample, and high-grade sub-bituminous coals having a fuel value of more than 9,500 B.T.U. on an unweathered air-dried sample; (d) low-grade sub-bituminous coals having a fuel value below 9,500 B.T.U. on an unweathered air-dried sample, and all lignite coals.

(2) Lands underlain by coal beds which contain 14 inches or over of clean coal, exclusive of partings, shall be classified as coal land where the coal shows a calorific value of 10,500 B. T. U. or over on an unweathered air-dried sample; for coals having a less calorific value the minimum thickness shall be

increased one inch for every decrease of 100 B.T.U. below 10,500. Thus, the minimum thickness of a coal having a B.T.U. value of 8,500 on an unweathered air-dried sample will be 34 inches.

(3) Lands containing coals of classes *a* and *b* of any thickness at depths greater than 3,000 ft. shall be classified as non-coal lands, except where the coal lies within three miles of a point where it can be reached by a 3,000-ft. shaft and the depth to the coal from the mouth of the shaft does not exceed 3,000 ft., or where the coal lies within six miles of the outcrop if the bed is horizontal, which distance shall be decreased with increasing dip to a limit of 3,000 ft. from the outcrop which shall apply if the bed dips over 45° , provided that in no case shall land containing coals of grades *a* and *b* be classed as coal land if the depth from the point of accessibility exceeds 3,000 feet.

(4) Lands containing coals of class *c* of any thickness at a depth greater than 2,000 ft. shall be classed as noncoal lands, except where the coal lies within two miles of a point where it can be reached by a 2,000-ft. shaft and the depth to the coal from the mouth of the shaft does not exceed 2,000 ft., or where the coal lies within four miles of the outcrop if the bed is horizontal, which distance shall be decreased with increasing dip to a limit of 2,000 ft. from the outcrop which shall apply if the bed dips over 45° , provided that in no case shall lands containing coals of grade *c* be classed as coal land if the depth from the point of accessibility exceeds 2,000 feet.

(5) Lands containing coals of class *d* of any thickness at a depth greater than 500 ft. shall be classed as noncoal, except where the coal lies within one mile of a point where it can be reached by a 500-ft. shaft and the depth to the coal from the mouth of the shaft does not exceed 500 ft., or where the coal lies within one mile of the outcrop if the bed is horizontal, which distance shall be decreased with increasing dip to a limit of 500 ft. from the outcrop which shall apply if the bed dips over 45° , provided that in no case shall lands containing coals of grade *d* be classed as coal land if the depth from the point of accessibility exceeds 500 feet.

(6) The price of coal lands of classes *a*, *b*, and *c* shall be

determined on the basis of the estimated tonnage at the rate of one-half to one cent per estimated ton for class *c*; one to two cents per ton for class *b*; and two to three cents per estimated ton for class *a*, when the lands are within fifteen miles of a completed railroad, and half that much when at a greater distance, but the price shall in no case exceed \$300 per acre, except in districts which contain large coal mines, where the character and extent of the coal are well known to the purchaser. When, however, topographic conditions affect the accessibility of the coal, the land within the fifteen-mile limit may be given a lower valuation, but in no case shall it be placed at less than the minimum, and a graded allowance may be made for increasing depth with the same restrictions.

(7) The rates per ton in the preceding paragraph are based on the assumption that only one bed of coal is present. If more than one bed occurs in any tract of land, in such relationship that the mining of one will not necessarily disturb the other, then for the second bed there shall be added to the price of the first bed, 60% of the value of the second bed according to the schedule; 40% of the value of the third, and 30% of the value of each additional bed, but the estimated price for coal land shall in no case exceed \$300 per acre, except in districts which contain large coal mines where the character and extent of the coal deposits are well known to the purchaser. Where a bed is over 15 ft. thick, the normal value shall be placed only on 15 ft. thick; the next 15 ft. or part thereof shall be valued at 60% of the normal; and the rest of the bed at 30% of the normal.

(8) The tonnage shall be estimated for the purpose of valuation on the basis of 1,000 tons of recovery per acre-foot.

(9) The coal price of lands of class *d* shall be the minimum provided by law, \$20 per acre when within fifteen miles of a railroad, and \$10 per acre when at a greater distance.

(10) In all valuations of coal lands, any special conditions enhancing the value of the land for coal-mining purposes shall be taken into consideration.

(11) When only a part of a smallest legal subdivision is underlain by coal, the price per acre shall be fixed by dividing

the total estimated coal values by the number of acres in the subdivision, but in no case shall this be less than the minimum provided by law.

(12) When lands which were at time of classification more than fifteen miles from a railroad, are brought within the fifteen-mile limit by the beginning of operation of a new road, all values given in the original classification shall be doubled by the register and receiver.

(13) Except in cases of entries now pending or entries made prior to classification, review of classification or valuation may be had only upon application therefor to the Secretary of the Interior, accompanied by a showing clearly and specifically setting forth conditions not existing or known at time of examination.

Persons desiring to make an agricultural or non-mineral entry on land classified as coal, may ask for reclassification by presenting evidence to show that the coal classification is erroneous. If a reclassification is denied, they may ask for a hearing in the local land office to overthrow the existing classification, at which they must assume the burden of proof, the defense of the coal classification being made for the Government by the Field Service of the General Land Office. If, as a result of a reclassification or a hearing, the land is decided to be non-coal, nonmineral filings and entries may be made. However, the classification by the Geological Survey has not been a perfunctory and nominal one, but is a result of thorough and careful investigation by geologists well trained in the work.

The title to land entered and patented as agricultural or nonmineral land, but which before final proof for patent was made, was classified, claimed, or reported to be valuable for coal, is subject to attack by the Government in its efforts to recover the coal, within the six years from date of patent as prescribed by the Statute of Limitations. To provide relief for those who in good faith took up land under the nonmineral laws, which was classified, claimed, or reported to be valuable for coal, not before filing was made, but after and before final proof, an Act was passed in 1909 enabling the nonmineral entryman to relinquish the coal to the United States and receive the

surface, subject to the right of the party who may purchase the coal from the United States, to enter and remove the coal after providing for payment of all damages that may be caused the surface owner. The nonmineral entryman may choose to deny the existence of coal. This will result in a land office hearing or contest, where the burden of proof is on the Government, since the nonmineral filing establishes or classifies the land as nonmineral. Should the fact that the land is coal land be established in the contest, the entryman may still relinquish the coal to the United States and receive the surface, notwithstanding the bad faith he has shown by not doing so at once. The scope of the above law separating the surface of the land from the coal underneath was extended in 1910 so that an agricultural or nonmineral entry, reserving the coal to the United States, may be made upon land classified as coal or withdrawn pending such classification. This law throws open to occupation and purchase under the agricultural and nonmineral laws large areas that were heretofore subject to entry as coal land only, or completely withdrawn from entry for the time being. Land entered under the nonmineral laws, which has been claimed, reported, or found valuable for coal after final proof upon an agricultural entry, and not before, cannot be recovered by the Government.

CHAPTER XXV

Timber and Stone Act

While building stone, both upon surveyed and unsurveyed land, may be taken up as placer claims, it may also be taken up under the Timber and Stone Act when upon surveyed land. Timber or stone land, to come under the provisions of this law, must be surveyed land in the public-land States, excluding Alaska, Arizona, and New Mexico. It must contain no mining claim or constructive entry; that is, must be unoccupied. The land must be nonmineral to the extent of not warranting development for mineral purposes. Trees suitable for construction purposes of any nature are regarded as timber. Trees fit for fuel only, are not so regarded and land so forested is not subject to entry under this law. Land more valuable for its timber or stone than for cultivation, is subject to this entry, even though it have some value for cultivation before or after removal of the timber or stone. Entry cannot be made under this guise for land more valuable for other purposes or essentially intended for other purposes.

An individual over 21 years of age, who is a citizen of the United States or has announced his intention to become such, may make one entry only of a maximum size of 160 acres; provided he has not acquired, or is claiming, since August 30, 1890, under the nonmineral laws an amount of public land, which, together with the timber and stone entry, would exceed 320 acres. An association or incorporation, whose members or stockholders are so qualified, may also make entry. The applicant must file an application by contiguous legal subdivisions in the local land office. The application states the qualifications of the applicant and that he has examined the land within thirty days, also its condition and probable value. This is accompanied by a filing fee of \$10. If the application is ac-

cepted, the land will be appraised, by a timber cruiser or other employee of the Field Service. Within thirty days after the appraisement, or lapse of the nine months appraisement period, applicant must tender the appraised price, or the valuation made in his application if no appraisement is made, which must not be less than \$2.50 per acre. Facilities are provided for reappraisement where protest is made. After payment of purchase price, a date will be set for final proof. Notice that this final proof will be made is posted in the local land office and published in a newspaper nearest the land for the sixty days prior to the day set for final proof. After final proof, if there are no protests or adverses pending, entry will be allowed, and patent will eventually issue. Protests may be made any time before final entry is allowed, and contests may be filed at any time before patent issues.

CHAPTER XXVI

Use of Timber on Public Land

ON MINERAL LAND

ACT OF CONGRESS: That all citizens of the United States and other persons, *bona fide* residents of the state of Colorado or Nevada, or either of the territories of New Mexico, Arizona, Utah, Wyoming, [North and South] Dakota, Idaho, or Montana, and all other mineral districts of the United States, shall be, and are hereby, authorized and permitted to fell and remove, for building, agricultural, mining, or other domestic purposes, any timber or other trees growing or being on the public lands, said lands being mineral, and not subject to entry under existing laws of the United States, except for mineral entry, in either of said states, territories or districts of which such citizens or persons may be at the time *bona fide* citizens, subject to such rules and regulations as the Secretary of the Interior may prescribe for the protection of the timber and of the undergrowth growing upon such lands, and for other purposes; provided, the provisions of this Act shall not extend to railroad corporations.

The miner may cut from his locations upon public land (excluding land in the National Forests) without asking for a permit, all the timber necessary in his mining and development operations; but as he is only an occupant operating under a license, although owning the mineral under his possessory right, he does not own the timber so as to be able to make whatever disposition of it he wishes, until the issuance of the receiver's receipt in the process of patenting the claim. Up to the issuance of the receiver's receipt, he cannot sell any timber from his claim; and it appears that he cannot lawfully cut timber from his locations, without a permit, for other purpose than that connected with their development and the milling, smelting, or reduction of his ores. Though the surplus of timber cut

in clearing the land necessary for mining and occupation purposes, may be sold or used, such cutting should be done under *bona fide* conditions.

The above Statute refers only to the States mentioned, and not to the other mining-law States referred to in this work—California, Oregon, Washington, and the District of Alaska. A similar provision has been separately provided for Alaska. The Statute by the clause, "and all other mineral districts of the United States", undoubtedly meant to include the mineral lands of California, Oregon, and Washington, but owing to the fact that such a construction would have led to the cutting of large quantities of public timber for commercial purposes and against the intent of the Statute, the Department of the Interior and the courts have held the clause to be surplusage and without weight. The Act applies only to lands subject to mineral entries. Lands subject to mineral entry are lands known to contain such deposits of mineral as warrant a prudent person in expending his time and money in the reasonable expectation of developing a mine thereon.

Application for permit to cut timber without charge in accordance with the above Act, must be presented or mailed to the register and receiver of the local land office, or the Chief of Field Division having jurisdiction over the land, who will supply application forms upon request. Application shall set forth names and legal residences of persons applying to fell and remove timber, names and residences of persons who are to use the timber, amount of timber required for each person, and the use to be made thereof, date it is desired to begin cutting, and description of land to be cut over. No timber may be cut for sale or transported from or used out of the State in which it is cut. Persons who commence cutting before their permits receive the final approval of the Commissioner of the General Land Office, will be liable for a reasonable stumpage if the permits are not approved. Where permits are secured by fraud, or immature trees are taken, or timber is not used or taken in accordance with the terms of the law, the Government will enforce civil and criminal liabilities as in other cases of timber trespass upon public land. These may range from the stumpage

value of the timber cut in the case of an unintentional trespass to the value of the timber where found, and a fine not exceeding \$500; to which may be added imprisonment for six months, in case of wilful and malicious timber trespass. There is no authorization to cut any small or limited amount of timber under the above Act without a permit. The Government, of course, has no jurisdiction over the timber on patented claims or land.

ON NONMINERAL LAND

ACT OF CONGRESS: And in the states of Colorado, Montana, Idaho, North Dakota, South Dakota, Wyoming, and the District of Alaska, and the gold and silver regions of Nevada and the territory of Utah, [and amended to include New Mexico, Arizona, California, Oregon, and Washington] in any criminal prosecution or civil action by the United States for a trespass on such public timber lands, or to recover timber or lumber cut thereon, it shall be a defense if the defendant shall show that the said timber was so cut or removed from the timber lands for use in such state or territory by a resident thereof for agricultural, mining, manufacturing, or domestic purposes, under rules and regulations made and prescribed by the Secretary of the Interior, and has not been transported out of the same; but nothing herein contained shall operate to enlarge the rights of any railway company to cut timber on the public domain, provided that the Secretary of the Interior shall make suitable rules and regulations to carry out the provisions of this Act; and he may designate the sections or tracts of land where timber may be cut; and it shall not be lawful to cut or remove any timber except as may be prescribed by such rules and regulations; but this Act shall not operate to repeal the Act of June third, eighteen hundred and seventy-eight, providing for the cutting of timber on mineral lands. (See p. 156.)

The intention of the above Act is to enable settlers upon public lands and other residents within the States mentioned—which include all of the mining-law States as treated in this work—to secure from public lands of a nonmineral character, timber or lumber for agricultural, mining, manufacturing, or domestic purposes, for use in the State obtained, under rules

and regulations prescribed by the Secretary of the Interior. Such timber or lumber cannot, however, be taken for sale or disposal, for use by other persons, or for export from the State in which cut. Timber or lumber to a stumpage value of \$50 a year can be cut without a permit, which is in contrast to the case of cutting on mineral lands where application should be made to cut any appreciable amount. A permit to cut to exceed a stumpage value of \$50 per year without charge, can be obtained as on mineral lands. In cases where qualified persons are not in a position to procure timber from public lands themselves, it is allowable to them to secure the cutting, removing, sawing, or other manufacture of the timber through the medium of others upon an agreement with the parties thus acting as their agents that they shall be paid a sufficient sum only to cover their time, labor, and other legitimate expenses incurred in connection therewith, exclusive of any charge for the timber itself; but no person, whether acting for himself, as an agent for another, or otherwise, will be permitted to cut or remove in any one year, timber or lumber to an amount exceeding in stumpage value \$50, except upon the granting of a permit.

A homesteader is entitled to use all the timber from his entry necessary to work his land, but before making final proof can dispose of none except the surplus made in the necessary clearing of his land for *bona fide* cultivation.

It is important to note that a corporation, mining or otherwise, cannot obtain timber under the laws herein discussed, either for mineral or nonmineral ground, unless it is organized and chartered under the laws of the State in which it wishes to cut timber. This arises from the facts that both Statutes read that only residents of a State may cut timber in it, and that corporations chartered outside of a State are considered as foreign or nonresident corporations or legal individuals. Timber trespass suits of considerable magnitude have been successfully prosecuted on this point by the Government, notwithstanding that it appears in the light of an unjust technicality. The law that timber cannot be cut in one State to be used in another is strictly enforceable, even though it is to be used

in the same district, as in the case of a district lying partly in two States.

If the necessary timber cannot be secured under the preceding two laws, or lawfully taken from valid locations, the only recourse is to purchase it in the open market, off of patented land, or from the Forest Service; to patent a piece of land for the timber; or to file on a piece of public timber land under a Timber and Stone entry.

TIMBER IN ALASKA

Actual settlers, residents, individual miners, and prospectors for minerals, not associations or corporations, may take timber from the public lands in Alaska for firewood, fencing, buildings, mining, prospecting, or other domestic purposes, without charge and without application or previous permit, the amount not to exceed a stumpage value of \$50 in any one calendar year. No timber may be sold, but an agent may be employed to cut it. Application to purchase timber to be cut for use in Alaska, but not for export, may be made to the receiver of the local land office for the district, to be acted upon similar to applications to cut timber in the United States.

CHAPTER XXVII

Timber and Mines Within National Forests

ACT OF CONGRESS: * * * Nor shall anything herein prohibit any person from entering upon such forest reservations for all proper and lawful purposes, including that of prospecting, locating, and developing the mineral resources thereof. Provided, that such persons comply with the rules and regulations covering such forest reservation. * * * And any mineral lands in any forest reservation, which have been or which may be shown to be such, and subject to entry under the existing mining laws of the United States, and the rules and regulations applying thereto, shall continue to be subject to such location and entry.

The Forest Reserves or National Forests, as they are more formally and properly known—since the term Forest Reserve is now obsolete officially—are tracts of government land wholly or partly covered with timber or undergrowth, that have been set aside by Congress or the President of the United States. These tracts have been withdrawn from entry to preserve a perpetual supply of timber, to prevent destruction of the forest cover which regulates the flow of streams, to protect local residents from unfair competition in the use of forest and range, to conserve the live-stock range from deterioration, and to lessen the loss and danger from forest fires. The National Forests are under the jurisdiction of both the Secretary of the Interior and the Secretary of Agriculture, but the authority and jurisdiction of each is separate and distinct. The Department of the Interior, as represented mainly by the General Land Office, has entire jurisdiction in surveying and passing title and permanent rights or easements to land within National Forests, just as it has over public land in general. The Department of Agriculture, as represented by the Forest Service, has entire jurisdiction re-

garding the care and conduct of National Forests, and the granting of permits for the occupancy of lands and the uses of the resources of the National Forests, that do not affect or cloud the fee title to the land. Forests and timber belonging to the Government, which are outside of National Forests, are in no way connected with the National Forests, and are not under any jurisdiction of the Forest Service, but solely under that of the Department of the Interior through the General Land Office mainly, just as any other unreserved public land.

By the Statute quoted, it is provided that prospecting and mining may be carried on within National Forests, under the provisions of the Federal Statutes, Land Department regulations, State statutes, and district rules, just as on public domain outside of the National Forests, except that the rules and regulations covering such National Forests must be complied with additionally. Townsites may be obtained under the townsite laws and regulations, by first having the area to be located as a townsite removed from the National Forest by proclamation or executive order of the President; as this is a rather difficult procedure, townsites and camp sites about mines in National Forests are usually located as mining and millsite claims. The National Forests are open to no location other than mineral—which includes the location of coal under the coal-land laws—except homestead entries upon agricultural land under a special Act. Permits are necessary for all occupancy, use, operation, or enterprises of any kind within National Forests, except upon patented lands or claims, upon valid locations for purposes necessary to their actual development and consistent with their character, and except for prospecting for mineral, transient camping, hunting, fishing, exploration, and surveying for lawful projects. All persons must secure permits before grazing any stock on open land in a National Forest, except for the few head in actual use by prospectors, campers, and travelers. Persons who may wish to make any use of the resources of the National Forests for which a permit is required, should consult the nearest Forest Officer.

The owners of patented mining claims, of valid unpatented mining claims, and of other valid claims under public-land laws

or legal titles which may be within National Forests, are free to occupy and enjoy their holdings, but must not interfere with the purposes for which the National Forests were created, and must not cut timber or make use of National Forest land without a permit, except within the limits and for the actual development of their claims. Permit must always be secured to build roads, trails, ditches, transmission and telephone lines, etc., when outside the limits of patented claims or land, unless on valid locations, and then only for the development of the locations. The locator or owner of a mining location has a right to use sufficient of the timber thereon to develop his claim. Timber, however, cannot be cut from one claim to be used on another of the same group, unless its use develops the claim from which it is cut, as well as the one where it is used, and if questioned the burden of proof is upon the claimant to show this. Timber from one group of mining claims cannot be used to develop another noncontiguous and separate group, although the two are owned in common. However, it is generally accepted that the rule on unreserved public land that timber may be taken from one claim for use on a noncontiguous claim or group if its use tends to develop the claim from which it was taken, also holds good within National Forests. A mining claimant has no right to cut and remove timber from his unpatented claim, merely for sale or other commercial purposes. Except the small quantity needed by transients, permission should always be asked by miners and settlers for the free use of timber off their entries or locations; the amount so permitted is usually limited to \$20 worth annually. If more than that amount is desired it will usually have to be purchased. Timber within National Forests is for sale, subject to the conditions that the amount taken shall not prejudice the purposes for which the National Forests were created, that the timber shall not be shipped from a region requiring the entire supply available, and that no timber monopoly shall be created. Free use permits will not be issued paying properties and large corporations who may reasonably be expected to pay for their timber.

Persons who are in the legal possession of unpatented valid mining claims have the right to use such portion of the grass

and other forage as is needed for the grazing of live stock used in the development of the claims, but they have no right to dispose of the grass or forage to any other person, or to collect any rental for the use of such claims for grazing purposes. The owners of patented claims or land within National Forests, of course have all the rights that such patents will give anywhere, and can make any disposition they wish of the surface or its products.

Much criticism has been made of the Forest Service in the past. The larger part has come from those whose unlawful pursuits and purposes have been interfered with, such as endeavoring to obtain timber or water-power sites by invalid and nominal mineral locations, or attempting to make use of public lands for grazing purposes to an inordinate extent or the exclusion of others also entitled to the same use. There are presumably two other causes of criticism. First, when the Forest Service was first organized, it was natural, that in attempting to meet and work out the questions involved in a problem of such magnitude and with so many conflicting interests, many minor errors should occur and wrong attitudes should be taken in the process of developing a system and learning the best procedure. Consequently there was great friction between miners and the Forest Service during the embryonic years of the National Forest. This cause for criticism has disappeared, except perhaps in isolated cases where a new employee of the Forest Service may take an unwarranted stand; in such a case the miner or complainant should carry the matter to the superior of the employee. It is advisable that the miner operating within a National Forest should secure a copy of 'The Use Book' of the Forest Service and familiarize himself with the rules and regulations therein. This book can be secured, without cost, from any Forest Supervisor, or by addressing the Superintendent of Documents, Washington, D. C., enclosing the purchase price, which is twenty-five cents.

The second of these other causes of criticism, is the fact that miners and prospectors upon public land, being practically unrestrained by the Government until a patent was asked for, were unable at first to brook the restraint of the National Forest regulations on their heretofore liberty, which was too often in-

terpreted as a license to do whatever and however they wanted. This cause is fast disappearing, for the straightforward and public-spirited miner realizes that as a result of extensive settlement in or adjacent to the mineral and timber regions and the great conflict of interests, it is just as necessary to carefully administer and protect the estate of the Government as the estate of a private owner. He also realizes that the National Forest system tends to equalize opportunities and give the small miner and prospector a fair chance in competition with large companies or unprincipled operators, and to render incalculable benefit by protecting the timber and water for himself and others, and even his possessions from destruction by forest fires. The creation of the National Forests has benefited the mining industry in a way that has not been appreciated, by practically withdrawing the land from all entries save under the mineral laws. While homestead entries may be made within National Forests, they can only embrace land of a pronounced agricultural type, and in a general way very few are made, thus preserving practically the whole of the Forests for prospecting. On the other hand, public land outside of the National Forests is favorably subject to all kinds of entries, resulting in much ground suitable for prospecting being patented for agricultural and grazing purposes, even the miner's locations being occasionally filed upon and patented away from him. Considerable trouble along these lines has been experienced in certain localities, and there is some reason to believe that the mining industry would be benefited, though at the expense of other industries, by placing all the mineral land practicable within the National Forests.

The purpose and intent of the Forest Service toward miners may be summarized by saying, that the Forest Service will be severe in cases of fraud and bad intention, but in cases of good faith and honest intention will be lenient, and while not overlooking the more essential requirements of the law, it will encourage and guide the miner toward a compliance with the law. This is seen in the case of where recommendations are made against granting patent to mining claims upon the point that the mineral character of the ground is not sufficiently established, through there being no mineral discoveries and the patent

work not developing the ground of the claims; still the miner is encouraged to hold his claims by possessory right and keep on digging. The miner who finds himself at difference with the Forest Service in any way, should patiently, but firmly and insistently, take up the matter and thrash it out, knowing that the ultimate outcome will be in accordance with sound public policy and the rights of the great army of miners and prospectors as a whole.

CHAPTER XXVIII

Water Appropriation

R. S., Sec. 2339. Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

R. S., Sec. 2340. All patents granted, or pre-emption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by the preceding section.

When the pioneer miners arrived in California, the only law on the use or possession of water that they knew was the common law or riparian right to the use of water. This law was in force in the older States and in England. It is based on the simple principle that the owners of the banks of a stream or body of water, are the sole owners of the right to use the water. This principle was found inapplicable to the new conditions; conditions requiring the use of water at points far distant and on lands nonadjacent to the streams from which the water was taken. This resulted in the development of the law of appropriation of water, the principle of which is that the first appropriator of water for a beneficial purpose has the prior right, without regard to riparian rights. Most of the water in the

West has been used under the law of appropriation, and in over half of the Western States it is the only law under which a right to use water can be perfected. In the remaining Western States, the two laws—appropriation and riparian rights—are in force side by side. The history of water rights in the West is simply a phase of the development of the mineral-land laws.

Under the common law of riparian rights, the owner of the land bordering on or containing a stream or body of water (as a lake) has a right to have the water flow past or through his land at all times in substantially the same quantity and quality as existed when he or others before him first obtained the land to which his riparian water rights are attached. At least, that the flow shall not be reduced in quantity to a point that will discommode him, subject, where the quantity is insufficient for the wants of all the various riparian owners along the stream, to having the supply apportioned among the riparian owners according to their holdings, and necessities. The owners of riparian rights do not own the water, but only the use of it. They may use the water for domestic purposes, for watering stock, or for irrigating their riparian land. Just what would be riparian land entitled to be irrigated as such, would be a question of fact for a jury; certainly land beyond a ridge and part of another watershed would not be riparian land. Riparian rights in water, where recognized, are attached to the land solely because it borders on or contains the stream or body of water. They are presumed to have been always attached, consequently they require no action or formality at law or any use or act to hold them. They are not subject to loss by abandonment or disuse, though the right to use the water to which the land is entitled may be disposed of separately from the land.

Under the law of appropriation, riparian rights are entirely disregarded. The right to use water is appropriated by diverting it, usually from a natural stream on public land, or on private land by permission, for the purpose of putting it to a beneficial use. The claimant appropriates his water subject to all prior appropriations, which must be supplied first according to their actual needs up to the amount of their appropriations. Likewise his needs up to the amount of his appropriation, must

be supplied before that of any subsequent appropriators. There is no apportioning of the water, the first appropriator has the first right and to the full amount he needs or is entitled to, and the other appropriators in the order of their respective appropriations. Later appropriations may be made of the surplus over what has been appropriated by prior claimants or of the surplus that is not used. Later comers may appropriate water above or below a prior appropriation, the water as discarded by the prior appropriator, or the water temporarily while it is not in use by him, but such use must not interfere with his use. The appropriator's right extends to the head of the stream and its branches to the extent that no later appropriation can be made or changes be effected, to his disadvantage.

Preference is given to no appropriation for any particular use, except in some States, where during periods of drouth, domestic uses must be supplied first, irrigation next, and then the other needs. Appropriation is based on the intention to use water for a beneficial purpose, consequently the appropriator need not be the owner or user of land. Married women, minors, aliens, individuals, and companies may make appropriations. The rights of an appropriator begin where he takes his water from the natural stream and end where he returns it to a natural stream. He may change these points of diversion and discharge, provided he does not interfere with any rights obtained by others before he makes his change. Those who take the waste or discharge of an appropriator before it has reached a natural stream, have no right to object to the change in the place of discharge. The appropriator having diverted water from a natural stream, may make use of a watercourse or natural channel as an intermediate link in his ditch system required to get the water to the place of use. An appropriation of more than is used, does not give any right to the unused surplus. A surplus is always open to location and appropriation, consequently no sale of it can be made under usual conditions.

The States that have adopted the dual system of the law of appropriation and the common law of riparian rights working side by side, a system known as the 'California system', are

California, Montana, North Dakota, South Dakota, and Washington. Oregon recognizes riparian rights obtained prior to 1909, but at present only appropriated rights can be initiated. In these States having the 'California system', appropriation may be made subject to prior appropriation and riparian rights. As the United States is the owner of the public land and primarily of the water upon its land, and chooses to allow appropriations of water upon its land, the patentee of public land acquires the riparian rights that go with it (where they are recognized) subject to all prior appropriations, but no future appropriations disadvantageous to his riparian rights can be made over his protest, though the surplus may be appropriated.

In the States of Arizona, Colorado, Idaho, Nevada, New Mexico, Oregon (except those initiated prior to 1909), Utah, and Wyoming, riparian rights are not recognized, and the only way the rights to use water may be acquired, whether upon riparian land or otherwise, is by appropriation. This has been called the 'Colorado system'.

A riparian owner may make an appropriation upon his own or public land, and may use water under combined right of appropriation and riparian ownership, if he does so without waste. Riparian rights are attached to lakes and ponds, and undoubtedly the law of appropriation also applies to these.

The law of appropriation was made for water in surface watercourses. To come under the head of surface watercourse, the water must have a tendency to flow fairly regularly. The quantity that flows is immaterial. A flowing well may be driven or a spring cleaned out, and if the water can be made to flow into a ditch or pipe, the flow may be appropriated. Water flowing underground can be appropriated, and subsequent claimants or land owners can be prevented from diverting the water by wells or tunnels. It is not entirely clear that percolating underground waters, not flowing in an underground stream, can be appropriated, but decisions have been rendered to that effect and there is every reason to believe they can and that a spring or well without a surface flow can be appropriated on public land, but not on private land unless by the permission of the land owner. Sections 2339 and 2340 of the Revised Statutes (quoted at the

beginning of this chapter) would certainly sanction this unless it was against local rules and customs and State statutes. This view is strengthened by the fact that water upon public land is, like the land, the property of the Government, even though the Government by the implied and written terms of the Statutes quoted allows it to be disposed of under State jurisdiction as a part of the police powers of the State.

A ditch or reservoir may be placed upon public land for the purpose of using water as provided for in the Statutes quoted. When the land passes into private ownership, the land owner must respect this easement over his land, but the ditch owner does not own the land occupied by his ditch; he owns only the rights to use and maintain the ditch, and can not enlarge this right to change the position of his ditch, except by permission of the land owner. The ditch may be abandoned without abandoning the right to the water.

Concerning the use of water under the specific conditions attached to mining, certain things are to be noted. By locating, rights very similar, if not equal, to those given by a patent are acquired; consequently, where riparian rights are recognized, a located or patented claim has a riparian right to use the water flowing through its ground. This right is not as conclusive as might be wished for, and consequently an appropriation should always be made. Where it is sought to divert the water off the claim having riparian rights, an appropriation must be made. In those States where riparian rights are not recognized, an appropriation must be made. In general, very little reliance should be placed upon the riparian rights of a mining claim. Where an unappropriated flowing spring or well is upon a claim, under riparian rights the claim owner also owns the water, but where appropriation only is recognized, an appropriation of the flow at the point it leaves the ground of the claim owner may be made by a stranger. What effect such an appropriation may have on the claim or land owner's use of the water flowing from the spring or well is not clear; the safe course is to make an appropriation of the water naturally arising on one's own ground. Flowing water that develops naturally or is developed artificially after patent is obtained from the Government, is private property

and cannot be appropriated. Such water may come from the driving of wells, opening up new springs, driving tunnels, or from ponds arising naturally. The surplus of such water as it leaves the private land may be used and appropriated, but no real right is obtained, for the land owner may cut off or divert the flow at his pleasure.

A mining location containing a spring or well without a surface flow and that has not been appropriated before the location, owns the spring or well, but such locations are precarious unless containing a mineral discovery and a showing can be made that it was taken up in good faith for the mineral therein and not to control water. A spring or well cannot be controlled by a millsite location. The claimant's possession may possibly remain unquestioned while holding by locating or possessory right, but the millsite cannot be patented unless used for some millsite purpose, for the Land Department has repeatedly said that a use of the water is not such a use as to entitle a millsite location to be patented; holding that water rights, including the necessary dams, ditches, etc., are protected by the two Statutes quoted at the beginning of this chapter, and that what is essential, is not a use of the water but a use of the land. Following this principle, patents have been refused upon millsite claims used for no other purpose than to contain a dam for collecting and storing water, while they have been allowed where tanks were placed on the ground for storage or pumping plants were installed. From the foregoing, it is deduced that a spring or well without a surface flow and upon public land may be appropriated without locating the land, if the water can be put to some beneficial use, such as domestic purposes, watering stock, or milling ore. In case of the ground not being subject to entry as a lode or placer claim, if it can be put to some millsite purpose, such as to contain a living cabin, corral, pumping plant, or similar, it should be located as a millsite, which should be sufficient to hold the water, but for the purpose of further safety, an appropriation should also be made. If the water is upon surveyed and nonmineral ground, the land may be secured through land scrip, but this would be a rather expensive method in some cases.

The method of appropriation in Arizona, California, Montana, and Washington is similar. That of California will be given as the type case. In these States an appropriation of water may be made by diverting it for some useful purpose without any notice, the appropriation being good from the time of diversion, but by complying with the statutory requirements of giving notice, etc., the rights date from time of giving notice. The method in California is to place at the point where it is intended to divert the water, a notice stating the amount of water to be taken, the place where it is to be used, the purpose for which it is to be used, and the means by which the diversion is to be made—ditch, flume, or pipe. This notice must be recorded. Within sixty days of posting the notice, work must begin and it must be carried on with due diligence until the means of diversion is completed. The completion of the means of diversion—the ditch, flume, or pipe—completes the water right; but if the actual application of the water is not made within a reasonable time the water right is lost. Under the above conditions, the right dates back to the time of posting notice, but if the notice is not posted and recorded, the work not begun within sixty days, or not carried forward with due diligence, the right does not relate back to the posting of notice. In such an event it only begins on the completion of the work. Consequently, where the requirements have not been complied with, any other appropriation made before the completion of the work and carried forward as prescribed, becomes the prior appropriation, even though completed after the defaulting appropriation.

The failure to make use of the water of an appropriation for a beneficial purpose in California for five years is held to constitute a forfeiture of the right. In other States the period varies from two years up, there being no specific time in many. Five years use in California of the water of a prior appropriation by a use adverse to and without the consent of the prior appropriation vests a right in the new claimant. In a similar way riparian rights may be lost through an adverse and unprotested appropriation.

In Colorado, Idaho, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, and Wyoming the procedure is some-

what different from that in California, and requires an application to the State engineer, who issues preliminary and final certificates and examines the appropriation. The procedure in these States has been developed primarily to meet the conditions under which irrigation is carried out. The following is a digest of the requirements in the different States. Those expecting to make appropriations in the States requiring application to the State engineer, should communicate with him and ask for forms, instructions, and a copy of the State statutes governing water appropriation.

ARIZONA.—Riparian rights are not recognized. The appropriator posts a notice at the place of diversion, stating the amount appropriated, a description of the necessary works to be built, and the terminal point. A copy of the notice must be recorded in each county through which the works run and in the office of the Secretary of State. Work must be commenced within reasonable time and carried on with reasonable diligence.

CALIFORNIA.—Riparian rights are recognized and upheld. A notice of appropriation must be posted at the proposed point of diversion, which shall state the amount of water claimed, the purpose for which it is to be used, the place at which it is to be used, and the means by which it is to be diverted. A copy of the notice must be filed with the county recorder within ten days after posting. Work must commence within sixty days after posting notice and continue with due diligence until completion.

COLORADO.—Riparian rights are not recognized. Appropriation is made by filing application with the State engineer within sixty days after beginning work. The certificate of approval of the State engineer must be filed with the county clerk and recorder. Due diligence must be used in construction.

IDAHO.—Riparian rights are not recognized. Priority of right dates from the original application filed with the State engineer for a permit to construct the necessary works before commencing such work. One-fifth of the construction work must be performed within one-half the allotted time, which is usually five years, and actual application of the water must be made within four years thereafter.

MONTANA.—Riparian rights exist and are recognized. An appropriation is made by posting a notice in writing at a conspicuous place at the intended point of diversion, stating amount claimed, purpose of appropriation, place of intended use, means of diversion, date of appropriation, and name of appropriator. Within twenty days file with the county clerk a notice of appropriation containing in addition the name or a description of the stream, description of the point of diversion, and reference to a natural object or permanent monument. Notice must be verified as an affidavit. Work must be commenced within forty days of posting notice and must be prosecuted with reasonable diligence to completion.

NEVADA.—Riparian rights are not recognized. Priority of appropriation dates from filing an application with the State engineer before commencement of work. After approval and publication of the notice in some newspaper by the State engineer, a certificate is issued which must be filed within thirty days of its issuance both in the county where water is diverted and in county where used.

NEW MEXICO.—Riparian rights are not recognized. Appropriation is made by filing an application with the State engineer before commencing work. Publication of notice of appropriation is required after its approval by the State engineer. One-fifth of the construction work must be completed within one-half of the allotted time, which is usually five years, and water must be applied usually within four years thereafter. Final certificate issues upon inspection after completion of work. All permits, decrees, and documents regarding water rights must be filed in the office of the probate clerk and *ex-officio* recorder of the county in which the works are situated.

NORTH DAKOTA.—Riparian rights exist and are recognized. Priority of appropriation dates from filing application with the State engineer before beginning work. Approval of application after its publication constitutes a permit. One-fifth of the work must be completed in one-half of the time allowed, and the completion must usually be within five years. Actual application of the water to some useful purpose must usually follow within four years. Actual application of water and inspection

are necessary for the issuance of final certificate. Non-use for three years causes a loss of the right.

OREGON.—Riparian rights obtained prior to February 1909 are recognized and upheld; since that date, water rights can be obtained by appropriation only. Appropriation is made by application to the State engineer before beginning work. Work may commence on approval of application. Actual construction work must commence within one year from date of approval, be carried on with reasonable diligence, and usually be completed within five years.

SOUTH DAKOTA.—Riparian rights are recognized and upheld. Priority of appropriation dates from filing of application with State engineer before beginning work. After publication and approval of application, work must be prosecuted with diligence. One-fifth of the work must be completed within one-half of the allotted time, which is usually five years. Actual application and use of the water must follow completion, usually within four years. Final certificate issues upon notice and examination of the actual use. Non-use for two years causes a forfeiture of the right.

UTAH.—Riparian rights are not recognized. Priority of appropriation dates from receiving the application in the office of the State engineer, which must be before commencing the work. After publication and approval, work may proceed, commencing within six months after approval, and usually requiring completion within five years. One-fifth of the work must be performed in one-half of the allotted time. After completion of the work and use of the water is made, a final certificate is issued, which must be recorded in the county where the water is diverted. Non-use for seven years causes a loss of the right.

WASHINGTON.—Riparian rights exist and are recognized. Appropriation is made by placing at the intended point of diversion, a notice stating amount of water appropriated, purpose of appropriation, place of intended use, and means of storage or diversion. Record a copy in the office of the county recorder within ten days after posting. Work must commence within three months from posting notice, if said use is by storage, or

within six months, if the use is by diversion. Work must be diligently prosecuted to completion.

WYOMING.—Riparian rights are not recognized. Priority of appropriation dates from filing an application with the State engineer before commencing work. If application is approved, work may proceed, one year being usually allowed in which to begin work. Five years is usually allowed to complete the work. Final certificate issues upon the perfection of the appropriation, which must be recorded in the office of the county clerk.

APPENDIX A

Digest of State Statutes Relative to Mineral Locations

ALASKA

Notices of location of mining claims shall be filed for record within ninety days from date of discovery. Proof of labor may be made and filed, not later than 90 days after close of year in which the annual labor is to be performed. Such proof is *prima facie* evidence of the performance of the work. If the proof is not filed within the time fixed, the burden of proof is upon the claim owner to show that such work has been performed. Adverse claims against an application for patent may be filed at any time during the 60 days of publication or within eight months thereafter, and the adverse suits may be instituted at any time within 60 days after the filing of the adverse claims in the local land office. See new placer law for Alaska on page 238a.

ARIZONA

LODE LOCATIONS

Erect at or contiguous to the point of discovery, a conspicuous monument of stones not less than three feet in height or a post at least four feet above ground. Post on or at the discovery monument, a location notice containing: Name of claim; name or names of locators; date of location; length and width of claim, and distance from discovery to each end of claim; general course of claim; locate claim by reference to a natural object or permanent monument. Ninety days is allowed from time of location to perform the following: Monument claim; record copy of location notice; sink discovery shaft. Boundaries shall be marked by six posts, projecting at least four feet above surface, or stone monuments at least three feet high, to be placed at each corner and centre of each end-line. The discovery shaft shall be at least eight feet deep from

lowest part of rim of shaft at surface, and deeper, if necessary, to show mineral in place. An open-cut, adit, or tunnel, equal in amount to a shaft eight feet deep, four feet wide, and six feet long, which shall cut a lode or mineral in place at a depth of ten feet (the statute probably purposed eight but now reads ten feet) from the surface, shall be equivalent to the discovery shaft. Proof of labor may be made and recorded within three months after expiration of the period fixed for the performance of annual labor or making of improvements on any mining claim, and shall be *prima facie* evidence of the performance of such labor and improvements.

PLACER LOCATIONS

The locator of a placer-mining claim shall locate his claim by posting a location notice thereon, containing the name of the claim, name or names of the locators, date of location, number of acres claimed, and reference to some natural object or permanent monument. Erect at each angle of the claim a post four inches by four and one-half feet in length, set one foot in the ground, and surrounded by a mound of stone and earth, or erect a mound of stone four feet in diameter at the base and three feet high. Within 60 days after location, record a copy of the location notice.

CALIFORNIA

For many years California had no State mining laws, being governed solely by the Federal Statutes and regulations and such customs and rules of the local mining districts as still remained in force. However, in 1909 a mining code very similar to those of the other mining States, except not requiring any discovery work, was adopted and is now in force.

LODE LOCATIONS

Any person, a citizen of the United States, or who has declared his intention to become such, may locate a claim upon a lode or vein by defining the boundaries of his claim so that they may be readily traced, and by posting at the point of discovery a notice of location which must contain: Name of

the lode or claim; name of the locator or locators; length along vein each way from discovery; width on each side of centre of vein; general course of vein or lode; date of location; reference to natural object or permanent monument. Within thirty days after posting notice of location upon a lode claim, record a true copy thereof in the office of the recorder of the county in which such claim lies. The failure or neglect of any locator of a mining claim to perform development work of the character, in the manner, and within the time required by the laws of the United States, shall disqualify such locators from relocating the ground embraced in the original location or mining claim or any part thereof under the mining laws, within three years after the date of his original location, and any attempted location thereof by any of the original locators shall render such location void. The provisions of this act (the State mining code) shall not in any manner be construed as affecting or abolishing any mining district or the rules and regulations thereof, within the State of California. Proof of labor shall be made and filed within 30 days after the time limit for performing such labor or improvements, and shall be *prima facie* evidence of the performance of such labor or improvements. The location of a tunnel right or location shall be made by establishing the boundary lines of the tunnel by stakes or monuments placed along the lines at an interval of not more than 600 ft. from the face or point of commencement of the tunnel to the terminus of 3000 ft. therefrom. And by posting a notice of location at the face or point of commencement of the tunnel, a true copy of which must be recorded within thirty days after posting. Said notice to contain: Name of locator or locators; date of location; proposed course or direction of the tunnel; description of tunnel with reference to natural object or permanent monument. A millsite not exceeding five acres may be located in the same manner as a placer claim. A true copy of the location notice must be recorded within thirty days of date of location.

PLACER LOCATIONS

The location of a placer claim shall be made by posting there-

on, upon a tree, rock in place, stone, post, or monument, a notice of location, and recording a true copy of the same within 30 days after posting. Said notice to contain: Name of claim; name of locator or locators; date of location; number of feet or acres claimed; reference to natural object or permanent monument. The boundaries shall be marked so that they may be readily traced, but where the United States survey has been extended over the land embraced in the location, the claim may be taken by legal subdivisions and no other reference than those of said survey shall be required and the boundaries of a claim so located and described need not be staked or monumented. The description by legal subdivisions shall be deemed the equivalent of marking.

COLORADO

LODE LOCATIONS

The width of lode claims located in Gilpin, Clear Creek, Boulder, and Summit counties is limited to 75 ft. on each side of centre of vein. In the remaining counties the width is limited to 150 ft. on each side of centre of vein. Post at point of discovery on the surface, before filing location certificate, a notice containing name of lode, name of locator, and date of discovery. Mark surface boundaries, before filing location certificate, by six posts hewed or marked on the side or sides toward the claim, sunk in the ground or in a pile of stones, and placed at each corner and centre of each side-line of the claim. Sixty days from uncovering or disclosing a lode and before filing location certificate are allowed in which to sink a discovery shaft upon the lode to a depth of at least ten feet from the lowest part of the rim of such shaft on the surface, and deeper, if necessary, to show a well defined crevice. An open-cut, cross-cut, or tunnel, which shall cut a lode at the depth of ten feet below the surface, or an adit driven at least ten feet in along the lode, shall be equivalent to a discovery shaft. Within three months from date of discovery, record a location certificate containing: Name of lode; name or names of locators; date of location; length of claim on each side of discovery shaft; general course of lode. Proof of labor may be made and

recorded within six months after any set time or annual period allowed for the performance of labor or making improvements upon any lode or placer claim, and shall be *prima facie* evidence of the performance of such labor or improvements.

PLACER LOCATIONS

Post upon the claim, before filing location certificate, a notice containing the name of the claim, the name of the locator, the date of discovery, and the number of feet or acres claimed. Mark boundaries, before filing location certificate, with posts sunk into the ground at each angle of the claim. Within 30 days from date of discovery, record a location certificate containing: Name of claim and designated as a placer claim; name or names of locators; date of location; number of acres or feet claimed; reference to natural object or permanent monument.

IDAHO

LODE LOCATIONS

At time of making discovery, erect a monument at place of discovery, upon which place the name of locator, name of claim, date of discovery, and length of vein claimed each way from monument. Within ten days from discovery, mark boundaries by establishing at each corner and at any angle in the side-lines, a monument marked with the name of the claim and the corner or angle. Monuments must be at least four feet high above the ground. Posts or trees used as such must be hewn and marked upon side facing toward the discovery, and must be at least four inches square or in diameter. At time of marking boundaries, post at discovery monument a notice of location, a substantial copy of which must be recorded within ninety days after location; notice to contain: Name of locator; name of claim; date of discovery; direction and distance claimed along ledge from the discovery; distance claimed on each side of middle of ledge; distance and direction from the discovery monument to such natural object or permanent monument, if any such there be, as will fix and describe, in the notice itself, the location of the claim; name of mining district, county, and State. There must be filed for record with the location certifi-

cate of all quartz and placer claims, the affidavit of one of the locators, stating that he is a citizen of the United States or has declared his intention to become such, that he is acquainted with the ground embraced by the location, that no part of the ground has any valid adverse claim upon it, and that the discovery work has been performed. Sixty days after location, is the time allowed to sink a shaft upon the lode to a depth of at least ten feet from the lowest part of the rim of such shaft at the surface, and of not less than sixteen square feet area. Any excavation which shall cut such vein ten feet from the lowest part of the rim of such shaft at the surface, and which shall measure 160 cu. ft. in extent shall be sufficient. Proof of labor may be made and recorded within sixty days after any time set or period allowed for the performance of labor and improvements upon any lode or placer claim. Such proof shall be *prima facie* evidence of the performance of such labor. Failure to file such proof shall be considered *prima facie* evidence that such labor has not been done.

PLACER LOCATIONS

At time of making the location, place a substantial post or monument as required in the location of quartz claims at each corner of location. Post on a location corner, a notice of location containing: Date of location; name of locator; name of claim; dimension of claim; mining district and county; distance and direction from said monument to such natural object or permanent monument, if any such there be, as will fix and describe, in the notice itself, the location of the claim. Within thirty days after the location, a substantial copy of the location notice must be filed for record, including the affidavit, as is required in the case of a quartz claim. Fifteen days are allowed after making the location, to make an excavation upon the claim of not less than one hundred cubic feet, for the purpose of prospecting the same.

MONTANA

Post at point of discovery, a notice of location containing the name of the claim, the name or names of the locators, the date of location (which shall be the date of posting such notice), and

the approximate dimensions of the claim. Thirty days following the location are allowed for monumenting; a monument to be placed at each angle and corner of the claim. The following kinds of monuments are prescribed, which must be marked with the name of the claim and the designation of the corner: A tree eight inches or more in diameter, blazed on four sides; a post at least four inches square by four and one-half feet in length, set one foot in the ground and surrounded by a mound of earth and stone at least four feet in diameter and two feet high; a squared stump, the equivalent of a post and mound; a stone at least six inches square by eighteen inches in length, set two-thirds of its length in the ground, with a mound of earth or stone alongside at least four feet in diameter by two feet in height; a boulder at least three feet above the natural surface of the ground on the upper side. Within sixty days after posting notice of location, record a certificate of location, which must be verified by being sworn to as an affidavit, and must contain the following: Name of claim or lode; name or names of locators; date of location; reference to natural object or permanent monument. If a lode claim, the direction and distance claimed along the lode from the discovery work, also width on each side of lode must be noted; if a placer claim, the dimensions or area of the claim and the location of the discovery work. The locator may, at his option, give a description of the discovery work, corner monuments, and other facts connected with the location. The locator within 60 days of posting location notice, shall sink a discovery shaft upon the lode, vein, or deposit at or near the point of discovery. Such shaft to be sunk to the depth of at least ten feet, vertically, below the lowest part of the rim of such shaft at the surface, or deeper, if necessary, to disclose the vein or deposit located. The cubical contents of such shaft shall not be less than 150 cu. ft. Any cut or tunnel which discloses the vein, lode, or deposit at a vertical depth of at least ten feet below the natural surface of the ground, and which constitutes at least 150 cu. ft. of excavation, shall be deemed the equivalent of the discovery shaft. Where the vein, lode, or deposit is exposed at less than ten feet depth, any deficiency in the depth of the discovery shaft, cut, or tunnel may be com-

pensated for by any horizontal extension of such working, or part of the discovery work may be done elsewhere upon the claim, but at least 75 cu. ft. of excavation shall be made at the point of discovery. The rights of any relocater of any abandoned or forfeited mining claim shall date from the posting of notice of location, and while he is duly performing the acts required by law to perfect his location, his rights shall not be affected by any re-entry or resumption of work by the former locator or claimant. A locator or claimant may, at any time, relocate his own claim for any purpose, except to avoid the performance of the annual labor thereof. Proof of labor may be made and recorded within twenty days after completion of the annual labor, which shall be *prima facie* evidence of the facts therein stated.

NEVADA

LODE LOCATIONS

A lode may be located by a citizen of the United States or one who has declared his intention to become such, by posting a notice of location at point of discovery, which notice must contain the name of the lode or claim, the name or names of the locators, the date of location, the number of feet each way from discovery along the vein, the width on each side of the vein, and the general course of the vein. Twenty days from posting of location notice, are allowed for monumenting. The monuments must be placed at each corner and at the centre of each side-line. The monuments may consist of: A blazed and marked stump, not less than four inches in diameter, nor less than three feet high; a rock in place, capped with smaller stones to a height of not less than three feet; a post at least four inches in diameter by four and one-half feet in length, set one foot in the ground, or in a mound of earth or stone; a loose stone not less than six inches in diameter and eighteen inches in length, set two-thirds of its length in the top of a mound of earth or stone, four feet in diameter and two and one-half feet in height. All trees, posts, or rocks used as monuments, when not four feet in diameter at the base, shall be surrounded by a mound of earth or stone four feet in diameter by two feet high, and must

be so marked as to designate the corners of the claim located. After having established the boundaries, the locator may file with the district mining recorder or in the absence of such a recorder, with the county recorder, a preliminary notice of location containing: Name of lode; number of feet claimed along lode; date of location; date on which boundaries were completed; name of locator or locators. Within ninety days of posting the location notice, the location certificate shall be filed with the district mining recorder and the county recorder, which must contain: Name of lode or vein; name or names of locators; date of location; reference to natural object or permanent monument; length along vein each way from discovery; width on each side of vein; general course of vein; dimensions and location of the discovery shaft or its equivalent; location and description of each corner with the markings thereon. Ninety days from posting location notice are allowed to sink a discovery shaft four feet by six feet to a depth of at least ten feet from the lowest part of the rim of such shaft at the surface, or deeper, if necessary, to show by such work a lode deposit of mineral in place. A cut, cross-cut, or tunnel, which cuts the lode at a depth of ten feet or an open-cut along said ledge or lode, equivalent in size to a shaft four feet by six feet by ten feet deep, is equivalent to a discovery shaft. Proof of labor may be made and recorded within sixty days after the performance of labor or improvements as required by law. Such proof shall be *prima facie* evidence of the performance of such labor and improvements.

The locator of a millsite shall mark the boundaries in the same manner as provided for placer claims, and shall post a notice on the claim, recording a similar location certificate within thirty days from date of location. Notice to contain: Name of locator or locators; name of vein or lode claim, or mine, of which he is the proprietor, or the name of the quartz mill or reduction works of which he is the owner; date of location; number of feet or acres claimed; reference to natural object or permanent monument.

The locator of a tunnel site shall establish the boundary lines of the tunnel by stakes or monuments placed along such lines at

intervals of not more than three hundred feet from the face or point of commencement of the tunnel to the terminus of the three thousand feet therefrom. The stakes or monuments shall be as provided for lode or placer claims. The locator of a tunnel site shall post at the face or point of commencement a notice, a similar notice to be recorded within 60 days of date of location. The notice shall contain: Name of locator or locators; date of location; proposed course or direction of the tunnel; height and width of tunnel; position and character of boundary monuments; reference to natural object or permanent monument.

PLACER LOCATIONS

Post upon a tree, rock in place, stone, post, or monument, a notice of location containing the name of the claim, name or names of the locators, date of location, and number of feet or acres claimed. The boundaries and location point must be marked in the same manner and by the same means as required by the State laws in connection with lode claims. Where the claim is taken by legal subdivisions upon surveyed land, only the location point need be marked or staked. Ninety days from posting of notice are allowed in which to perform twenty dollars worth of improvements upon the claim. A certificate of location must be recorded with the district mining recorder and the county recorder within 90 days of location, to contain: Name of claim and designated as a placer; name or names of locators; date of location; number of feet or acres claimed; reference to natural object or permanent monument; kind, amount, and place of work performed.

NEW MEXICO

LODE LOCATIONS

Mark boundaries by four posts or monuments, set at each corner of claim. Post in a conspicuous place on the location a notice and record a copy of the same within three months after posting; notice to contain: Name or names of locators; intention to locate mining claim; reference to natural object or permanent monument. Within 90 days after taking possession, sink a discovery shaft to a depth of at least ten feet from the lowest rim

of such shaft at the surface, exposing mineral in place, or drive a tunnel, adit or open-cut to at least ten feet below the surface, exposing mineral in place. Proof of labor may be made and filed, within 60 days from and after the time within which the assessment work required by law to be done shall have been performed, and shall be *prima facie* evidence of the facts therein stated. Failure to file proof of labor will throw the burden of proof on the claim owner.

PLACER LOCATIONS

At the time of making location of any placer claim, cause a notice of such location to be placed at a designated corner of the claim so located. Said notice shall contain: Name of claim; purpose and kind of material for which the claim is located; name or names of the locators; if upon surveyed land, a description of such claim by legal subdivisions; if upon unsurveyed land, a description of the claim by metes and bounds, with reference to some known object or permanent monument. Each corner of the claim, whether upon surveyed or unsurveyed land, shall be marked by a wooden post at least four feet high, or by a substantial stone monument. A duplicate of such location notice shall be filed and recorded in the office of the probate clerk of the county wherein the land is located, within 90 days after such location is made and such notice placed on the claim as before provided; prior to filing such notice, the locator or locators must have made a *bona fide* discovery of the mineral or material claimed in said notice, or said location will be void and subject to relocation by others. Provided, that in cases where lands have been located for petroleum oil or natural gas, the locator or locators shall have the time from the date of the location to the end of the calendar year succeeding that in which the location is made, to make a discovery of petroleum oil or natural gas; also, that when lands have been located for petroleum oil or natural gas, the locator or locators shall have the right to the exclusive possession and occupancy of the lands embraced in said location for the purpose of prospecting for petroleum oil or natural

gas during the period of time provided in this section for making a discovery of petroleum oil or natural gas.

NORTH DAKOTA

The width of lode claims shall not exceed 150 feet on each side of the centre of the vein. Post at point of discovery on the surface, before filing location notice, a notice containing name of lode, name of locators, date of discovery, number of feet in length on each side of discovery, and width on each side of lode. The boundaries should be marked before filing location certificate by eight posts, hewed or blazed on the side facing the claim, and plainly marked with the name of lode and corner, end, or side of claim that they respectively represent, and set in ground or monument of stone. One post to be placed at each corner, one at the centre of each side-line, and one at each end of the lode. Within 60 days from date of discovery, record a location notice containing: Name of lode; name of locator; date of location; length claimed on each side of discovery shaft; width claimed on each side of vein or lode; general course of lode. Within 60 days from uncovering or disclosing the lode, and before filing location certificate, sink a discovery shaft thereon. Any open-cut, cross-cut, or tunnel at a depth sufficient to disclose the mineral vein or lode, or an adit of at least ten feet in along the lode, from point where the lode may be in any manner discovered, shall be equivalent to a discovery shaft.

OREGON

A person may locate one claim only upon each lead or vein, except the discoverer of a new lead or vein not previously located upon, who shall be entitled to one additional claim for the discovery thereof. A citizen of the United States, or one who has declared his intention to become such, may locate a lode by placing thereon a notice containing: Name of lode or claim; name or names of locators; date of location; length along lode each way from discovery; width on each side of lode; general course or strike of vein or lode with reference to some natural object or permanent monument. Boundaries

must be marked within 30 days after posting location notice by six posts, projecting not less than three feet above the surface of the ground, and not less than four inches square or in diameter, or by mounds of stone, or earth and stone, at least two feet in height. A monument to be placed at each corner and at the centre ends of such claim. Within 60 days from date of posting location notice and before recording same, a discovery shaft which shall not be deemed a part of the annual or assessment work must be sunk to a depth of at least ten feet from the lowest part of the rim of such shaft at the surface, or deeper, if necessary, to show by such work a vein or lode of mineral deposit in place. A cut, cross-cut, or tunnel, which cuts the lode at a depth of ten feet, or an open-cut at least six feet deep, four feet wide, and ten feet in length along the lode from the point where same may in any manner be discovered, is equivalent to such discovery shaft. Within 60 days from date of posting location notice, a copy of the location notice must be filed for record, together with the affidavit of the locator or other person that the discovery work has been performed.

SOUTH DAKOTA

The width of lode claims shall be 150 feet on each side of the centre of the vein. The boundaries shall be marked, before filing location certificate, by eight posts, hewed or blazed on the side or sides facing the claim and plainly marked with the name of lode and corner, end, or side of claim that they respectively represent, and set in ground or monument of stone. One post to be placed at each corner, one at the centre of each side-line, and one at each end of the lode. There should be posted at the point of discovery on the surface, before filing location certificate, a notice containing: The name of lode; the name or names of locators; the date of discovery; the length on each side of discovery; the width on each side of lode. Within 60 days from uncovering or disclosing a lode, and before recording the location certificate, the discovery shaft must be sunk a sufficient depth to show a well defined mineral vein or lode, and not less than ten feet in depth on the lower

side. Any open-cut of at least ten-foot face, cross-cut, or tunnel at a depth sufficient to disclose the mineral vein or lode, or an adit driven at least ten feet in along the lode from the point where the lode may be in any manner discovered, shall be equivalent to a discovery shaft. Sixty days from date of discovery are allowed to record a location certificate, which shall contain: Name of lode; name or names of locators; date of location; length on each side of discovery shaft; width on each side of lode; general course of lode. When the location certificate is filed for record, an acknowledgment must be taken and posted with the original notice on the claim within ninety days from date of the original notice on the ground, the acknowledgment certificate to contain name of location, name or names of locators, date of filing, and book and page where recorded.

UTAH

Upon making a discovery, erect a monument at place of discovery and place thereon a location notice containing: Name of lode or claim; name of locator or locators; date of location; if a lode claim, length along vein each way from discovery, width on each side of vein, general course of vein, and reference by natural object or permanent monument; if a placer or millsite claim, the number of acres or superficial feet claimed, and reference to a natural object or permanent monument. Within thirty days from date of posting location notice, file a substantial copy for record. End-lines of each claim must be parallel. When doing the assessment work for a group at one point, post a notice at the discovery monument of each claim stating where such work is being done; also post a notice at entrance to the workings where said work is being done, stating the name of the claims for which the work is being done. Proof of labor may be made and filed within thirty days after completion of work or improvements, which shall be *prima facie* evidence of the facts therein stated.

WASHINGTON

LODE LOCATIONS .

Locators shall post at the discovery at time of discovery a

notice containing the name of the lode, the name of the locator or locators, and the date of discovery. Boundaries must be marked, before filing notice for record, by substantial posts or stone monuments bearing name of lode and date of location, one at each corner of the claim. Monuments and posts must not be less than three feet high. If posts, they must not be less than four inches in diameter. Brush should be cut and trees blazed to mark the lines. Before filing location notice for record, except on mining claims located west of the summit of the Cascade mountains, sink a discovery shaft upon the lode to a depth of ten feet from the lowest part of the rim of such a shaft at the surface. Any open-cut or tunnel having a length of ten feet which shall cut a lode at a depth of ten feet below the surface, shall be equivalent to a discovery shaft. Within 90 days from date of discovery, record a location notice containing: Name or names of locators; date of location; length on each side of discovery; general course of lode; reference to some natural object or permanent monument. Proof of labor may be made and recorded upon placer and lode claims within thirty days after the expiration of the time fixed for annual labor or improvements, and shall be *prima facie* evidence of such labor or improvements.

PLACER LOCATIONS

Post immediately at point of discovery a location notice containing: Name of claim; name of locator or locators; date of discovery and posting notice; description of claim by reference to legal subdivisions if in conformity with the public surveys, otherwise refer to natural object or permanent monument. Mark the boundaries upon the ground within thirty days from discovery, even if claim is located by legal subdivisions. Within thirty days from date of discovery record the location notice. Within sixty days from date of discovery, perform labor in developing, aggregating at least ten dollars for each twenty acres or fractional part, except that this does not apply to placer claims located for the development of petroleum, natural gas, and other natural oil products. Upon performance of the discovery or location labor, file affidavit of its performance and

nature, 'proof of labor', which shall be *prima facie* evidence of the facts therein stated.

WYOMING

LODE LOCATIONS

Post at point of discovery on the surface, before filing location certificate, a notice containing: Name of lode or claim; name of discoverer and locator; date of such discovery. Before filing location certificate, mark boundaries by six monuments of stone or posts, hewed or marked on the side which faces the claim; one monument at each side corner and one at the centre of each side-line. Within 60 days from discovery of lode and before filing a location certificate, sink a shaft upon the discovery lode to a depth of ten feet from the lowest part of the rim of such shaft at the surface. Any open-cut which shall cut the vein ten feet in length and with face ten feet in height, or any cross-cut or tunnel on the vein ten feet in length and cutting the vein ten feet below the surface as measured from the bottom of such tunnel, is the equivalent of a discovery shaft. Sixty days from date of discovery are allowed to record a location certificate containing: Name of lode claim; name or names of locators; date of location; length along vein each way from discovery shaft; width on each side of discovery workings; general course of vein; reference to section or quarter-section corner if upon surveyed land, or to natural object or permanent monument if upon unsurveyed land. Proof of labor may be made and recorded within 60 days of the completion of the required assessment work.

PLACER LOCATIONS

Post upon claim, before filing location certificate, a notice containing the name of claim, name of locator or locators, date of discovery, and number of feet or acres claimed. Mark, before filing location certificate, by posts or stone monuments at each corner of claim. Within ninety days after discovery, record a location certificate containing: Name of claim designated as a placer; name or names of locators; date of location; number of feet or acres claimed; reference to a natural object or permanent monument.

APPENDIX B.

UNITED STATES MINING STATUTES AND REGULATIONS OF THE GENERAL LAND OFFICE.

APPROVED MARCH 29, 1909.

LAWS.

TITLE XXXII, CHAPTER 6, REVISED STATUTES.

Mineral Lands and Mining Resources.

SEC. 2318. In all cases lands valuable for minerals shall be reserved from sale, except as otherwise expressly directed by law. Mineral lands reserved.

SEC. 2319. All valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States. Mineral lands open to purchase by citizens.

SEC. 2320. Mining claims upon veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits, heretofore located, shall be governed as to length along the vein or lode by the customs, regulations, and laws in force at the date of their location. A mining claim located after the tenth day of May, eighteen hundred and seventy-two, whether located by one or more persons, may equal, but shall not exceed, one thousand five hundred feet in length along the vein or lode; but no location of a mining claim shall be made until the discovery of the vein or lode within the Length of mining claims upon veins or lodes.

limits of the claim located. No claim shall extend more than three hundred feet on each side of the middle of the vein at the surface, nor shall any claim be limited by any mining regulation to less than twenty-five feet on each side of the middle of the vein at the surface, except where adverse rights existing on the tenth day of May, eighteen hundred and seventy-two, render such limitation necessary. The end lines of each claim shall be parallel to each other.

Proof of citizenship.

SEC. 2321. Proof of citizenship, under this chapter, may consist, in the case of an individual, of his own affidavit thereof; in the case of an association of persons unincorporated, of the affidavit of their authorized agent, made on his own knowledge or upon information and belief; and in the case of a corporation organized under the laws of the United States, or of any State or Territory thereof, by the filing of a certified copy of their charter or certificate of incorporation.

Locators' rights of possession and enjoyment.

SEC. 2322. The locators of all mining locations heretofore made or which shall hereafter be made, on any mineral vein, lode, or ledge, situated on the public domain, their heirs and assigns, where no adverse claim exists on the tenth day of May, eighteen hundred and seventy-two, so long as they comply with the laws of the United States, and with State, Territorial, and local regulations not in conflict with the laws of the United States governing their possessory title, shall have the exclusive right of possession and enjoyment of all the surface included within the lines of their locations, and of all veins, lodes, and ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of such surface locations. But their right of possession to such outside parts of such veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as above described, through the end lines of

their locations, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges. And nothing in this section shall authorize the locator or possessor of a vein or lode which extends in its downward course beyond the vertical lines of his claim to enter upon the surface of a claim owned or possessed by another.

SEC. 2323. Where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid, but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right to all undiscovered veins on the line of such tunnel. Owners of tunnels, rights of.

SEC. 2324. The miners of each mining district may make regulations not in conflict with the laws of the United States, or with the laws of the State or Territory in which the district is situated, governing the location, manner of recording, amount of work necessary to hold possession of a mining claim, subject to the following requirements: The location must be distinctly marked on the ground so that its boundaries can be readily traced. All records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or claims located by reference to some natural object or permanent monument as will identify the claim. On each claim located after the tenth day of May, eighteen hundred and seventy-two, and until a patent has been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year. Regulations made by miners.

On all claims located prior to the tenth day of May, eighteen hundred and seventy-two, ten dollars' worth of labor shall be performed or improvements made by the tenth day of June, eighteen hundred and seventy-four, and each year thereafter, for each one hundred feet in length along the vein until a patent has been issued therefor; but where such claims are held in common, such expenditure may be made upon any one claim; and upon a failure to comply with these conditions the claim or mine upon which such failure occurred shall be open to relocation in the same manner as if no location of the same had ever been made, provided that the original locators, their heirs, assigns, or legal representatives, have not resumed work upon the claim after failure and before such location. Upon the failure of any one of several co-owners to contribute his proportion of the expenditures required hereby, the co-owners who have performed the labor or made the improvements may, at the expiration of the year, give such delinquent co-owner personal notice in writing or notice by publication in the newspaper published nearest the claim for at least once a week for ninety days, and if at the expiration of ninety days after such notice in writing or by publication such delinquent should fail or refuse to contribute his proportion of the expenditure required by this section his interest in the claim shall become the property of his co-owners who have made the required expenditures.

Patents for
mineral lands,
how obtained.

SEC. 2325. A patent for any land claimed and located for valuable deposits may be obtained in the following manner: Any person, association, or corporation authorized to locate a claim under this chapter, having claimed and located a piece of land for such purposes, who has, or have, complied with the terms of this chapter, may file in the proper land office an application for a patent, under oath, showing such compliance, together with a plat and field notes of the claim or claims in common, made by or under the direction of the United States surveyor-general, showing accurately the boundaries of the claim or

claims, which shall be distinctly marked by monuments on the ground, and shall post a copy of such plat, together with a notice of such application for a patent, in a conspicuous place on the land embraced in such plat previous to the filing of the application for a patent, and shall file an affidavit of at least two persons that such notice has been duly posted, and shall file a copy of the notice in such land office, and shall thereupon be entitled to a patent for the land, in the manner following: The register of the land office, upon the filing of such application, plat, field notes, notices, and affidavits, shall publish a notice that such application has been made, for the period of sixty days, in a newspaper to be by him designated as published nearest to such claim; and he shall also post such notice in his office for the same period. The claimant at the time of filing this application, or at any time thereafter, within the sixty days of publication, shall file with the register a certificate of the United States surveyor-general that five hundred dollars' worth of labor has been expended or improvements made upon the claim by himself or grantors; that the plat is correct, with such further description by such reference to natural objects or permanent monuments as shall identify the claim, and furnish an accurate description to be incorporated in the patent. At the expiration of the sixty days of publication the claimant shall file his affidavit, showing that the plat and notice have been posted in a conspicuous place on the claim during such period of publication. If no adverse claim shall have been filed with the register and the receiver of the proper land office at the expiration of the sixty days of publication, it shall be assumed that the applicant is entitled to a patent, upon the payment to the proper officer of five dollars per acre, and that no adverse claim exists; and thereafter no objection from third parties to the issuance of a patent shall be heard, except it be shown that the applicant has failed to comply with the terms of this chapter.

SEC. 2326. Where an adverse claim is filed during the ^{A d v e r s e} claim, proceed-
ings on.

period of publication, it shall be upon oath of the person or persons making the same, and shall show the nature, boundaries, and extent of such adverse claim, and all proceedings, except the publication of notice and making and filing of the affidavit thereof, shall be stayed until the controversy shall have been settled or decided by a court of competent jurisdiction, or the adverse claim waived. It shall be the duty of the adverse claimant, within thirty days after filing his claim, to commence proceedings in a court of competent jurisdiction, to determine the question of the right of possession, and prosecute the same with reasonable diligence to final judgment; and a failure so to do shall be a waiver of his adverse claim. After such judgment shall have been rendered, the party entitled to the possession of the claim, or any portion thereof, may, without giving further notice, file a certified copy of the judgment-roll with the register of the land office, together with the certificate of the surveyor-general that the requisite amount of labor has been expended or improvements made thereon, and the description required in other cases, and shall pay to the receiver five dollars per acre for his claim, together with the proper fees, whereupon the whole proceedings and the judgment-roll shall be certified by the register to the Commissioner of the General Land Office, and a patent shall issue thereon for the claim, or such portion thereof as the applicant shall appear, from the decision of the court, to rightly possess. If it appears from the decision of the court that several parties are entitled to separate and different portions of the claim, each party may pay for his portion of the claim with the proper fees, and file the certificate and description by the surveyor-general, whereupon the register shall certify the proceedings and judgment-roll to the Commissioner of the General Land Office, as in the preceding case, and patents shall issue to the several parties according to their respective rights. Nothing herein contained shall be construed to prevent the alienation of a title conveyed by a patent for a mining claim to any person whatever.

SEC. 2327. The description of vein or lode claims upon surveyed lands shall designate the location of the claims with reference to the lines of the public survey, but need not conform therewith; but where patents have been or shall be issued for claims upon unsurveyed lands, the surveyors-general, in extending the public survey, shall adjust the same to the boundaries of said patented claims so as in no case to interfere with or change the true location of such claims as they are officially established upon the ground. Where patents have issued for mineral lands, those lands only shall be segregated and shall be deemed to be patented which are bounded by the lines actually marked, defined, and established upon the ground by the monuments of the official survey upon which the patent grant is based, and surveyors-general in executing subsequent patent surveys, whether upon surveyed or unsurveyed lands, shall be governed accordingly. The said monuments shall at all times constitute the highest authority as to what land is patented, and in case of any conflict between the said monuments of such patented claims and the descriptions of said claims in the patents issued therefor the monuments on the ground shall govern, and erroneous or inconsistent descriptions or calls in the patent descriptions shall give way thereto.

Description
of mining vein
or lode claims.

Patents to
conform to
official monu-
ments.

Monuments
to govern de-
scriptions.

SEC. 2328. Applications for patents for mining claims under former laws now pending may be prosecuted to a final decision in the General Land Office; but in such cases where adverse rights are not affected thereby, patents may issue in pursuance of the provisions of this chapter; and all patents for mining claims upon veins or lodes heretofore issued shall convey all the rights and privileges conferred by this chapter, where no adverse rights existed on the tenth day of May, eighteen hundred and seventy-two.

Pending ap-
plications; ex-
isting rights.

SEC. 2329. Claims usually called "placers," including all forms of deposit, excepting veins of quartz, or other rock in place, shall be subject to entry and patent, under like circumstances and conditions, and upon similar pro-

Conformity
of placer claims
to surveys,
limit of.

ceedings, as are provided for vein or lode claims; but where the lands have been previously surveyed by the United States, the entry in its exterior limits shall conform to the legal subdivisions of the public lands.

Subdivisions
of ten-acre
tracts; maxi-
mum of placer
locations.

SEC. 2330. Legal subdivisions of forty acres may be subdivided into ten-acre tracts; and two or more persons, or associations of persons, having contiguous claims of any size, although such claims may be less than ten acres each, may make joint entry thereof; but no location of a placer claim, made after the ninth day of July, eighteen hundred and seventy, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States surveys; and nothing in this section contained shall defeat or impair any bona fide preemption or homestead claim upon agricultural lands, or authorize the sale of the improvements of any bona fide settler to any purchaser.

Conformity
of placer claims
to surveys,
limitation of
claims.

SEC. 2331. Where placer claims are upon surveyed lands, and conform to legal subdivisions, no further survey or plat shall be required, and all placer-mining claims located after the tenth day of May, eighteen hundred and seventy-two, shall conform as near as practicable with the United States system of public-land surveys, and the rectangular subdivisions of such surveys, and no such location shall include more than twenty acres for each individual claimant; but where placer claims can not be conformed to legal subdivisions, survey and plat shall be made as on unsurveyed lands; and where by the segregation of mineral lands in any legal subdivision a quantity of agricultural land less than forty acres remains, such fractional portion of agricultural land may be entered by any party qualified by law, for homestead or preemption purposes.

What evi-
dence of pos-
session, &c., to
establish a
right to a pat-
ent.

SEC. 2332. Where such person or association, they and their grantors, have held and worked their claims for a period equal to the time prescribed by the statute of limitations for mining claims of the State or Territory where the same may be situated, evidence of such possession and working of the claims for such period shall be

sufficient to establish a right to a patent thereto under this chapter, in the absence of any adverse claim; but nothing in this chapter shall be deemed to impair any lien which may have attached in any way whatever to any mining claim or property thereto attached prior to the issuance of a patent.

SEC. 2333. Where the same person, association, or corporation is in possession of a placer claim, and also a vein or lode included within the boundaries thereof, application shall be made for a patent for the placer claim, with the statement that it includes such vein or lode, and in such case a patent shall issue for the placer claim, subject to the provisions of this chapter, including such vein or lode, upon the payment of five dollars per acre for such vein or lode claim and twenty-five feet of surface on each side thereof. The remainder of the placer claim or any placer claim not embracing any vein or lode claim shall be paid for at the rate of two dollars and fifty cents per acre, together with all costs of proceedings; and where a vein or lode, such as is described in section twenty-three hundred and twenty, is known to exist within the boundaries of a placer claim, an application for a patent for such placer claim which does not include an application for the vein or lode claim shall be construed as a conclusive declaration that the claimant of the placer claim has no right of possession of the vein or lode claim; but where the existence of a vein or lode in a placer claim is not known, a patent for the placer claim shall convey all valuable mineral and other deposits within the boundaries thereof.

Proceedings
for patent for
placer claim,
&c.

SEC. 2334. The surveyor-general of the United States may appoint in each land district containing mineral lands as many competent surveyors as shall apply for appointment to survey mining claims. The expenses of the survey of vein or lode claims, and the survey and subdivision of placer claims into smaller quantities than one hundred and sixty acres, together with the cost of publication of notices, shall be paid by the applicants, and they

Surveyor-
general to ap-
point survey-
ors of mining
claims, &c.

shall be at liberty to obtain the same at the most reasonable rates, and they shall also be at liberty to employ any United States deputy surveyor to make the survey. The Commissioner of the General Land Office shall also have power to establish the maximum charges for surveys and publication of notices under this chapter; and, in case of excessive charges for publication, he may designate any newspaper published in a land district where mines are situated for the publication of mining notices in such district, and fix the rates to be charged by such paper; and, to the end that the Commissioner may be fully informed on the subject, each applicant shall file with the register a sworn statement of all charges and fees paid by such applicant for publication and surveys, together with all fees and money paid the register and the receiver of the land office, which statement shall be transmitted, with the other papers in the case, to the Commissioner of the General Land Office.

Verification
of affidavits,
&c.

SEC. 2335. All affidavits required to be made under this chapter may be verified before any officer authorized to administer oaths within the land district where the claims may be situated, and all testimony and proofs may be taken before any such officer, and, when duly certified by the officer taking the same, shall have the same force and effect as if taken before the register and receiver of the land office. In cases of contest as to the mineral or agricultural character of land, the testimony and proofs may be taken as herein provided on personal notice of at least ten days to the opposing party; or if such party can not be found, then by publication of at least once a week for thirty days in a newspaper, to be designated by the register of the land office as published nearest to the location of such land; and the register shall require proof that such notice has been given.

Where veins
intersect, &c.

SEC. 2336. Where two or more veins intersect or cross each other, priority of title shall govern, and such prior location shall be entitled to all ore or mineral contained within the space of intersection; but the subsequent loca-

tion shall have the right of way through the space of intersection for the purposes of the convenient working of the mine. And where two or more veins unite, the oldest or prior location shall take the vein below the point of union, including all the space of intersection.

SEC. 2337. Where nonmineral land not contiguous to the vein or lode is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such nonadjacent surface ground may be embraced and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable to veins or lodes; but no location hereafter made of such nonadjacent land shall exceed five acres, and payment for the same must be made at the same rate as fixed by this chapter for the superficies of the lode. The owner of a quartz mill or reduction works, not owning a mine in connection therewith, may also receive a patent for his mill site, as provided in this section.

SEC. 2338. As a condition of sale, in the absence of necessary legislation by Congress, the local legislature of any State or Territory may provide rules for working mines, involving easements, drainage, and other necessary means to their complete development; and those conditions shall be fully expressed in the patent.

SEC. 2339. Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

Patents, pre-emption, and homesteads subject to vested and accrued water rights.

SEC. 2340. All patents granted, or preemption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by the preceding section.

Mineral lands in which no valuable mines are discovered open to homesteads.

SEC. 2341. Wherever, upon the lands heretofore designated as mineral lands, which have been excluded from survey and sale, there have been homesteads made by citizens of the United States, or persons who have declared their intention to become citizens, which homesteads have been made, improved, and used for agricultural purposes, and upon which there have been no valuable mines of gold, silver, cinnabar, or copper discovered, and which are properly agricultural lands, the settlers or owners of such homesteads shall have a right of preemption thereto, and shall be entitled to purchase the same at the price of one dollar and twenty-five cents per acre, and in quantity not to exceed one hundred and sixty acres; or they may avail themselves of the provisions of chapter five of this Title, relating to "Homesteads."

Mineral lands, how set apart as agricultural lands.

SEC. 2342. Upon the survey of the lands described in the preceding section, the Secretary of the Interior may designate and set apart such portions of the same as are clearly agricultural lands, which lands shall thereafter be subject to preemption and sale as other public lands, and be subject to all the laws and regulations applicable to the same.

Additional land districts and officers, power of the President to provide.

SEC. 2343. The President is authorized to establish additional land districts, and to appoint the necessary officers under existing laws, wherever he may deem the same necessary for the public convenience in executing the provisions of this chapter.

Provisions of this chapter not to affect certain rights.

SEC. 2344. Nothing contained in this chapter shall be construed to impair, in any way, rights or interests in mining property acquired under existing laws; nor to affect the provisions of the act entitled "An act granting to A. Sutro the right of way and other privileges to aid in the construction of a draining and exploring tunnel

to the Comstock lode, in the State of Nevada," approved July twenty-five, eighteen hundred and sixty-six.

SEC. 2345. The provisions of the preceding sections of this chapter shall not apply to the mineral lands situated in the States of Michigan, Wisconsin, and Minnesota, which are declared free and open to exploration and purchase, according to legal subdivisions, in like manner as before the tenth day of May, eighteen hundred and seventy-two. Any bona fide entries of such lands within the States named since the tenth day of May, eighteen hundred and seventy-two, may be patented without reference to any of the foregoing provisions of this chapter. Such lands shall be offered for public sale in the same manner, at the same minimum price, and under the same rights of preemption as other public lands.

SEC. 2346. No act passed at the first session of the Thirty-eighth Congress, granting lands to States or corporations to aid in the construction of roads or for other purposes, or to extend the time of grants made prior to the thirtieth day of January, eighteen hundred and sixty-five, shall be so construed as to embrace mineral lands, which in all cases are reserved exclusively to the United States, unless otherwise specially provided in the act or acts making the grant.

ACTS OF CONGRESS PASSED SUBSEQUENT TO THE REVISED STATUTES.

AN ACT To amend the act entitled "An act to promote the development of the mining resources of the United States," passed May tenth, eighteen hundred and seventy-two.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of the fifth section of the act entitled "An act to promote the development of the mining resources of the United States," passed May tenth, eighteen hundred and seventy-two, which requires expend-

Mineral lands in certain States excepted.

Grant of lands to States or corporations not to include mineral lands.

Claim located prior to May 10, 1872, first annual expenditure extended to Jan. 1, 1875.

itures of labor and improvements on claims located prior to the passage of said act, are hereby so amended that the time for the first annual expenditure on claims located prior to the passage of said act shall be extended to the first day of January, eighteen hundred and seventy-five.

AN ACT To amend section two thousand three hundred and twenty-four of the Revised Statutes, relating to the development of the mining resources of the United States.

Money expended in a tunnel considered as expended on the lode.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section two thousand three hundred and twenty-four of the Revised Statutes be, and the same is hereby, amended so that where a person or company has or may run a tunnel for the purpose of developing a lode or lodes, owned by said person or company, the money so expended in said tunnel shall be taken and considered as expended on said lode or lodes, whether located prior to or since the passage of said act; and such person or company shall not be required to perform work on the surface of said lode or lodes in order to hold the same as required by said act.

AN ACT To exclude the States of Missouri and Kansas from the provisions of the act of Congress entitled "An act to promote the development of the mining resources of the United States," approved May tenth, eighteen hundred and seventy-two.

Missouri and Kansas excluded from the operation of the mineral laws.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That within the States of Missouri and Kansas deposits of coal, iron, lead, or other mineral be, and they are hereby, excluded from the operation of the act entitled "An act to promote the development of the mining resources of the United States," approved May tenth, eighteen hundred and seventy-two, and all lands in said States shall be subject to disposal as agricultural lands.

AN ACT Authorizing the citizens of Colorado, Nevada, and the Territories to fell and remove timber on the public domain for mining and domestic purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all citizens of the United States and other persons, bona fide residents of the State of Colorado, or Nevada, or either of the Territories of New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, or Montana, and all other mineral districts of the United States, shall be, and are hereby, authorized and permitted to fell and remove, for building, agricultural, mining, or other domestic purposes, any timber or other trees growing or being on the public lands, said lands being mineral, and not subject to entry under existing laws of the United States, except for mineral entry, in either of said States, Territories, or districts of which such citizens or persons may be at that time bona fide residents, subject to such rules and regulations as the Secretary of the Interior may prescribe for the protection of the timber and of the undergrowth growing upon such lands, and for other purposes: *Provided,* The provisions of this act shall not extend to railroad corporations.

Citizens of Colorado, Nevada, and the Territories authorized to fell and remove timber on the public domain for mining and domestic purposes.

SEC. 2. That it shall be the duty of the register and the receiver of any local land office in whose district any mineral land may be situated to ascertain from time to time whether any timber is being cut or used upon any such lands, except for the purposes authorized by this act, within their respective land districts; and, if so, they shall immediately notify the Commissioner of the General Land Office of that fact; and all necessary expenses incurred in making such proper examinations shall be paid and allowed such register and receiver in making up their next quarterly accounts.

SEC. 3. Any person or persons who shall violate the provisions of this act, or any rules and regulations in pursuance thereof made by the Secretary of the Interior,

shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined in any sum not exceeding five hundred dollars, and to which may be added imprisonment for any term not exceeding six months.

AN ACT To amend sections twenty-three hundred and twenty-four and twenty-three hundred and twenty-five of the Revised Statutes of the United States concerning mineral lands.

Application for patent may be made by authorized agent. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That section twenty-three hundred and twenty-five of the Revised Statutes of the United States be amended by adding thereto the following words: "*Provided, That where the claimant for a patent is not a resident of or within the land district wherein the vein, lode, ledge, or deposit sought to be patented is located, the application for patent and the affidavits required to be made in this section by the claimant for such patent may be made by his, her, or its authorized agent, where said agent is conversant with the facts sought to be established by said affidavits: And provided, That this section shall apply to all applications now pending for patents to mineral lands.*"

On unpatented claims period commences on Jan. 1 succeeding date of location. **SEC. 2.** That section twenty-three hundred and twenty-four of the Revised Statutes of the United States be amended by adding the following words: "*Provided, That the period within which the work required to be done annually on all unpatented mineral claims shall commence on the first day of January succeeding the date of location of such claim, and this section shall apply to all claims located since the tenth day of May, anno Domini eighteen hundred and seventy-two.*"

AN ACT To amend section twenty-three hundred and twenty-six of the Revised Statutes relating to suits at law affecting the title to mining claims.

In action brought title not established in either party. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

bled, That if, in any action brought pursuant to section twenty-three hundred and twenty-six of the Revised Statutes, title to the ground in controversy shall not be established by either party, the jury shall so find, and judgment shall be entered according to the verdict. In such case costs shall not be allowed to either party, and the claimant shall not proceed in the land office or be entitled to a patent for the ground in controversy until he shall have perfected his title.

AN ACT To amend section twenty-three hundred and twenty-six of the Revised Statutes in regard to mineral lands, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the adverse claim required by section twenty-three hundred and twenty-six of the Revised Statutes may be verified by the oath of any duly authorized agent or attorney in fact of the adverse claimant cognizant of the facts stated; and the adverse claimant, if residing or at the time being beyond the limits of the district wherein the claim is situated, may make oath to the adverse claim before the clerk of any court of record of the United States or the State or Territory where adverse claimant may then be, or before any notary public of such State or Territory.

Adverse claim may be verified by agent.

SEC. 2. That applicants for mineral patents, if residing beyond the limits of the district wherein the claim is situated, may make any oath or affidavit required for proof of citizenship before the clerk of any court of record, or before any notary public of any State or Territory.

Affidavit of citizenship; before whom made.

AN ACT To exclude the public lands in Alabama from the operation of the laws relating to mineral lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That within the State of Alabama all public lands whether mineral or otherwise, shall be subject to disposal only as agricultural lands: *Provided, however*, That all

Alabama excepted from the operation of the mineral laws.

lands which have heretofore been reported to the General Land Office as containing coal and iron shall first be offered at public sale: *And provided further*, That any bona fide entry under the provisions of the homestead law of lands within said State heretofore made may be patented without reference to an act approved May tenth, eighteen hundred and seventy-two, entitled "An act to promote the development of the mining resources of the United States," in cases where the persons making application for such patents have in all other respects complied with the homestead law relating thereto.

AN ACT Providing a civil government for Alaska.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

Mining laws
extended to the
district of
Alaska.

SEC. 8. That the said district of Alaska is hereby created a land district, and a United States land office for said district is hereby located at Sitka. The commissioner provided for by this act to reside at Sitka shall be ex officio register of said land office, and the clerk provided for by this act shall be ex officio receiver of public moneys, and the marshal provided for by this act shall be ex officio surveyor-general of said district and the laws of the United States relating to mining claims, and the rights incident thereto shall, from and after the passage of this act, be in full force and effect in said district, under the administration thereof herein provided for, subject to such regulations as may be made by the Secretary of the Interior, approved by the President: *Provided*, That the Indians or other persons in said district shall not be disturbed in the possession of any lands actually in their use or occupation or now claimed by them, but the terms under which such persons may acquire title to such lands is reserved for future legislation by Congress: *And provided further*, That parties who have located mines or mineral privileges

therein under the laws of the United States applicable to the public domain, or who have occupied and improved or exercised acts of ownership over such claims, shall not be disturbed therein, but shall be allowed to perfect their title to such claims by payment as aforesaid: *And provided also*, That the land not exceeding six hundred and forty acres at any station now occupied as missionary stations among the Indian tribes in said section, with the improvements thereon erected by or for such societies, shall be continued in the occupancy of the several religious societies to which said missionary stations respectively belong until action by Congress. But nothing contained in this act shall be construed to put in force in said district the general land laws of the United States.

AN ACT Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-one, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

No person who shall after the passage of this act, enter upon any of the public lands with a view to occupation, entry, or settlement under any of the land laws shall be permitted to acquire title to more than three hundred and twenty acres in the aggregate, under all of said laws, but this limitation shall not operate to curtail the right of any person who has heretofore made entry or settlement on the public lands, or whose occupation, entry or settlement, is validated by this act: *Provided*, That in all patents for lands hereafter taken up under any of the land laws of the United States or on entries or claims validated by this act west of the one hundredth meridian it shall be expressed that there is reserved from the lands in said patent described a right of way thereon for ditches or canals constructed by the authority of the United States. * * *

Right of entry under all the land laws restricted to 320 acres. (Repealed, see act Mar. 3, 1891, sec. 17.)
Reservation in patents for right of way for ditches and canals constructed.

AN ACT To repeal the timber-culture laws, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

Town sites on mineral lands authorized.

Lands entered under the mineral laws not included in restriction to 320 acres.

SEC. 16. That town-site entries may be made by incorporated towns and cities on the mineral lands of the United States, but no title shall be acquired by such towns or cities to any veins of gold, silver, cinnabar, copper, or lead, or to any valid mining claim or possession held under existing law. When mineral veins are possessed within the limits of an incorporated town or city, and such possession is recognized by local authority or by the laws of the United States, the title to town lots shall be subject to such recognized possession and the necessary use thereof, and when entry has been made or patent issued for such town sites to such incorporated town or city, the possessor of such mineral vein may enter and receive patent for such mineral vein, and the surface ground appertaining thereto: *Provided*, That no entry shall be made by such mineral-vein claimant for surface ground where the owner or occupier of the surface ground shall have had possession of the same before the inception of the title of the mineral-vein applicant.

SEC. 17. That reservoir sites located or selected and to be located and selected under the provisions of "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-nine, and for other purposes," and amendments thereto, shall be restricted to and shall contain only so much land as is actually necessary for the construction and maintenance of reservoirs, excluding so far as practicable lands occupied by actual settlers at the date of the location of said reservoirs, and that the provisions of "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June

thirtieth, eighteen hundred and ninety-one, and for other purposes," which reads as follows, viz: "No person who shall after the passage of this act enter upon any of the public lands with a view to occupation, entry, or settlement under any of the land laws shall be permitted to acquire title to more than three hundred and twenty acres in the aggregate under all said laws," shall be construed to include in the maximum amount of lands the title to which is permitted to be acquired by one person only agricultural lands and not include lands entered or sought to be entered under mineral land laws.

* * * * *

AN ACT To authorize the entry of lands chiefly valuable for building stone under the placer mining laws.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person authorized to enter lands under the mining laws of the United States may enter lands that are chiefly valuable for building stone under the provisions of the law in relation to placer mineral claims: *Provided,* That lands reserved for the benefit of the public schools or donated to any State shall not be subject to entry under this act.

Entry of lands chiefly valuable for building stone under the placer - mining laws.

AN ACT To amend section numbered twenty-three hundred and twenty-four of the Revised Statutes of the United States relating to mining claims.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of section numbered twenty-three hundred and twenty-four of the Revised Statutes of the United States, which require that on each claim located after the tenth day of May, eighteen hundred and seventy-two, and until patent has been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year, be suspended for the year eighteen hundred and ninety-

Requirement of proof of expenditure for the year 1893 suspended except as to South Dakota.

three, so that no mining claim which has been regularly located and recorded as required by the local laws and mining regulations shall be subject to forfeiture for non-performance of the annual assessment for the year eighteen hundred and ninety-three: *Provided*, That the claimant or claimants of any mining location, in order to secure the benefits of this act shall cause to be recorded in the office where the location notice or certificate is filed on or before December thirty-first, eighteen hundred and ninety-three, a notice that he or they, in good faith intend to hold and work said claim: *Provided, however*, That the provisions of this act shall not apply to the State of South Dakota.

This act shall take effect from and after its passage.

AN ACT To amend section numbered twenty-three hundred and twenty-four of the Revised Statutes of the United States relating to mining claims.

Requirement of proof of expenditure for the year 1894 suspended except as to South Dakota.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of section numbered twenty-three hundred and twenty-four of the Revised Statutes of the United States, which require that on each claim located after the tenth day of May, eighteen hundred and seventy-two, and until patent has been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year, be suspended for the year eighteen hundred and ninety-four, so that no mining claim which has been regularly located and recorded as required by the local laws and mining regulations shall be subject to forfeiture for non-performance of the annual assessment for the year eighteen hundred and ninety-four: *Provided*, That the claimant or claimants of any mining location, in order to secure the benefits of this act, shall cause to be recorded in the office where the location notice or certificate is filed on or before December thirty-first, eighteen hundred and ninety-four, a notice that he or they in good faith intend to hold and work said claim:

Provided, however, That the provisions of this act shall not apply to the State of South Dakota.

SEC. 2. That this act shall take effect from and after its passage.

AN ACT Making appropriations for current and contingent expenses of the Indian Department and fulfilling treaty stipulations with various Indian tribes for the fiscal year ending June thirtieth, eighteen hundred and ninety-six, and for other purposes.

[WICHITA LANDS, OKLAHOMA.]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

The said Wichita and affiliated bands of Indians in the Indian Territory hereby cede, convey, transfer, relinquish, forever and absolutely, without any reservation whatever, all their claim, title and interest of every kind and character in and to the lands embraced in the following-described tract of country in the Indian Territory, to wit:

Commencing at a point in the middle of the main channel of the Washita River, where the ninety-eighth meridian of west longitude crosses the same, thence up the middle of the main channel of said river to the line of ninety-eight degrees forty minutes west longitude, thence on said line of ninety-eight degrees forty minutes due north to the middle of the channel of the main Canadian River, thence down the middle of said main Canadian River to where it crosses the ninety-eighth meridian, thence due south to the place of beginning.

* * * * *

That the laws relating to the mineral lands of the United States are hereby extended over the lands ceded by the foregoing agreement. M i n e r a l
laws.

AN ACT Making appropriations for current and contingent expenses of the Indian Department and fulfilling treaty stipulations with various Indian tribes for the fiscal year ending June thirtieth, eighteen hundred and ninety-seven, and for other purposes.

* * * * *

[FORT BELKNAP INDIAN RESERVATION, MONTANA.]

SEC. 8.

* * * * *

That upon the filing in the United States local land office for the district in which the lands surrendered by article one of the foregoing agreement are situated, of the approved plat of survey authorized by this section, the lands so surrendered shall be open to occupation, location, and purchase, under the provisions of the mineral-land laws only, subject to the several articles of the foregoing agreement: *Provided*, That said lands shall be sold at ten dollars per acre: *And Provided further*, That the terms of this section shall not be construed to authorize the occupancy of said lands for mining purposes prior to the date of filing said approved plat of survey. * * *

[BLACKFEET INDIAN RESERVATION, MONTANA.]

SEC. 9.

* * * * *

That upon the filing in the United States local land office for the district in which the lands surrendered by article one of the foregoing agreement are situated, of the approved plat of survey authorized by this section, the lands so surrendered shall be opened to occupation, location, and purchase under the provisions of the mineral-land laws only, subject to the several articles of the foregoing agreement: *Provided*, That the terms of this section shall not be construed to authorize occupancy of said lands for mining purposes prior to the date of filing said approved plat of survey.

Provisos.

Price.
No occupancy
prior to open-
ing.

Proviso.

No occupancy
prior to open-
ing.

[SAN CARLOS INDIAN RESERVATION, ARIZONA.]

SEC. 10.

* * * * *

That upon the filing in the United States local land office for the district in which the lands surrendered by article one of the foregoing agreement are situated, of the approved plat of survey authorized by this section, the lands so surrendered shall be opened to occupation, location, and purchase under the provisions of the mineral-land laws only, subject to the several articles of the foregoing agreement: *Provided*, That the terms of this section shall not be construed to authorize occupancy of said lands for mining purposes prior to the date of filing said approved plat of survey: *Provided, however*, That any person who in good faith prior to the passage of this act had discovered and opened, or located, a mine of coal or other mineral, shall have a preference right of purchase for ninety days from and after the official filing in the local land office of the approved plat of survey provided for by this section.

Provisos.

No occupancy prior to opening.

Preference to discoverers of coal, etc.

AN ACT To authorize the entry and patenting of lands containing petroleum and other mineral oils under the placer mining laws of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person authorized to enter lands under the mining laws of the United States may enter and obtain patent to lands containing petroleum or other mineral oils, and chiefly valuable therefor, under the provisions of the laws relating to placer mineral claims: *Provided*, That lands containing such petroleum or other mineral oils which have heretofore been filed upon, claimed, or improved as mineral, but not yet patented, may be held and patented under the provisions of this act the same as if such filing, claim, or improvement were subsequent to the date of the passage hereof.

Entry and patenting of lands containing petroleum and other mineral oils under the placer-mining laws.

AN ACT Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-eight, and for other purposes.

* * * * *

All public lands heretofore designated and reserved by the President of the United States under the provisions of the act approved March third, eighteen hundred and ninety-one, the orders for which shall be and remain in full force and effect, unsuspended and unrevoked, and all public lands that may hereafter be set aside and reserved as public forest reserves under said act, shall be as far as practicable controlled and administered in accordance with the following provisions:

Forest reservations, when to be established.

No public forest reservation shall be established, except to improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States; but it is not the purpose or intent of these provisions, or of the act providing for such reservations, to authorize the inclusion therein of lands more valuable for the mineral therein, or for agricultural purposes, than for forest purposes.

* * * * *

Use of timber, etc., by settlers, etc.

The Secretary of the Interior may permit, under regulations to be prescribed by him, the use of timber and stone found upon such reservations, free of charge, by bona fide settlers, miners, residents, and prospectors for minerals, for firewood, fencing, buildings, mining, prospecting, and other domestic purposes, as may be needed by such persons for such purposes; such timber to be used within the State or Territory, respectively, where such reservations may be located.

Egress and ingress of settlers within reservations, etc.

Nothing herein shall be construed as prohibiting the egress or ingress of actual settlers residing within the boundaries of such reservations, or from crossing the same to and from their property or homes; and such wagon

roads and other improvements may be constructed thereon as may be necessary to reach their homes and to utilize their property under such rules and regulations as may be prescribed by the Secretary of the Interior. Nor shall anything herein prohibit any person from entering upon such forest reservations for all proper and lawful purposes, including that of prospecting, locating, and developing the mineral resources thereof: *Provided*, That such persons comply with the rules and regulations covering such forest reservations.

* * * * *

Upon the recommendation of the Secretary of the Interior, with the approval of the President, after sixty days' notice thereof, published in two papers of general circulation in the State or Territory wherein any forest reservation is situated, and near the said reservation, any public lands embraced within the limits of any forest reservation which, after due examination by personal inspection of a competent person appointed for that purpose by the Secretary of the Interior, shall be found better adapted for mining or for agricultural purposes than for forest usage, may be restored to the public domain. And any mineral lands in any forest reservation which have been or which may be shown to be such, and subject to entry under the existing mining laws of the United States and the rules and regulations applying thereto, shall continue to be subject to such location and entry, notwithstanding any provisions herein contained.

Restoration
of mineral or
agricultural
lands to the
public domain.

AN ACT Extending the homestead laws and providing for right of way for railroads in the district of Alaska, and for other purposes.

* * * * *

SEC. 13. That native-born citizens of the Dominion of Canada shall be accorded in said district of Alaska the same mining rights and privileges accorded to citizens of

Mining
rights in Alaska to native-born citizens of the Dominion of Canada.

the United States in British Columbia and the Northwest Territory by the laws of the Dominion of Canada or the local laws, rules, and regulations; but no greater rights shall be thus accorded than citizens of the United States, or persons who have declared their intention to become such, may enjoy in said district of Alaska; and the Secretary of the Interior shall from time to time promulgate and enforce rules and regulations to carry this provision into effect.

AN ACT Making further provisions for a civil government for Alaska, and for other purposes.

* * * * *

What recorded. SEC. 15. The respective recorders shall, upon the payment of the fees for the same prescribed by the Attorney-General, record separately, in large and well-bound separate books, in fair hand:

First. Deeds, grants, transfers, contracts to sell or convey real estate mortgages of real estate, releases of mortgages, powers of attorney, leases which have been acknowledged or proved, mortgages upon personal property;

* * * * *

Ninth. Affidavits of annual work done on mining claims;

Tenth. Notices of mining location and declaratory statements;

Eleventh. Such other writings as are required or permitted by law to be recorded, including the liens of mechanics, laborers, and others: *Provided*, Notices of loca-

Proviso. M i n i n g claims. tion of mining claims shall be filed for record within ninety days from the date of the discovery of the claim

Where in- struments re- corded. described in the notice, and all instruments shall be recorded in the recording district in which the property or subject-matter affected by the instrument is situated, and where the property or subject-matter is not situated in any established recording district the instrument affecting the same shall be recorded in the office of the clerk of the division of the court having supervision over the

recording division in which such property or subject-matter is situated.

* * * * *

* * * *Provided*, Miners in any organized mining district may make rules and regulations governing the recording of notices of location of mining claims, water rights, flumes and ditches, mill sites and affidavits of labor, not in conflict with this act or the general laws of the United States; and nothing in this act shall be construed so as to prevent the miners in any regularly organized mining district not within any recording district established by the court from electing their own mining recorder to act as such until a recorder therefor is appointed by the court: *Provided further*, All records heretofore regularly made by the United States commissioner at Dyea, Skagway, and the recorder at Douglas City, not in conflict with any records regularly made with the United States commissioner at Juneau, are hereby legalized. And all records heretofore made in good faith in any regularly organized mining district are hereby made public records, and the same shall be delivered to the recorder for the recording district including such mining district within six months from the passage of this act.

Proviso.
Miners' regulations for recording, etc.—recorder.

Records at Dyea, etc., legalized.

SEC. 26. The laws of the United States relating to mining claims, mineral locations, and rights incident thereto are hereby extended to the district of Alaska: *Provided*, That subject only to such general limitations as may be necessary to exempt navigation from artificial obstructions all land and shoal water between low and mean high tide on the shores, bays, and inlets of Bering Sea, within the jurisdiction of the United States, shall be subject to exploration and mining for gold and other precious metals by citizens of the United States, or persons who have legally declared their intentions to become such, under such reasonable rules and regulations as the miners in organized mining districts may have heretofore made or may hereafter make governing the temporary possession thereof

Mining laws.

Provisos.
Gold, etc. Explorations on Bering Sea.

—miners' regulations.

—not to conflict with Federal laws.

Exclusive permits to mine void, etc.

Provision reserving roadway, etc., not to apply. Vol. 30, p. 413.

for exploration and mining purposes until otherwise provided by law: *Provided further*, That the rules and regulations established by the miners shall not be in conflict with the mining laws of the United States; and no exclusive permits shall be granted by the Secretary of War authorizing any person or persons, corporation, or company to excavate or mine under any of said waters below low tide, and if such exclusive permit has been granted it is hereby revoked and declared null and void; but citizens of the United States or persons who have legally declared their intention to become such shall have the right to dredge and mine for gold or other precious metals in said waters, below low tide, subject to such general rules and regulations as the Secretary of War may prescribe for the preservation of order and the protection of the interests of commerce; such rules and regulations shall not, however, deprive miners on the beach of the right hereby given to dump tailings into or pump from the sea opposite their claims, except where such dumping would actually obstruct navigation; and the reservation of a roadway sixty feet wide, under the tenth section of the act of May fourteenth, eighteen hundred and ninety-eight, entitled "An act extending the homestead laws and providing for right of way for railroads in the district of Alaska, and for other purposes," shall not apply to mineral lands or town sites.

* * * * *

AN ACT To ratify an agreement with the Indians of the Fort Hall Reservation in Idaho, and making appropriations to carry the same into effect.

[DISPOSITION OF COMANCHE, KIOWA, AND APACHE LANDS.]

* * * * *

That should any of said lands allotted to said Indians, or opened to settlement under this act, contain valuable mineral deposits, such mineral deposits shall be open to location and entry, under the existing mining laws of the

United States, upon the passage of this act, and the mineral laws of the United States are hereby extended over said lands.

* * * * *

AN ACT Extending the mining laws to saline lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all unoccupied public lands of the United States containing salt springs, or deposits of salt in any form, and chiefly valuable therefor, are hereby declared to be subject to location and purchase under the provisions of the law relating to placer-mining claims: *Provided,* That the same person shall not locate or enter more than one claim hereunder.

Mining laws extended to saline lands.

AN ACT Making appropriations for the current and contingent expenses of the Indian Department and for fulfilling treaty stipulations with various Indian tribes for the fiscal year ending June thirtieth, nineteen hundred and three, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

That the Secretary of the Interior, with the consent thereto of the majority of the adult male Indians of the Uintah and the White River tribes of Ute Indians, to be ascertained as soon as practicable by an inspector, shall cause to be allotted to each head of a family eighty acres of agricultural land which can be irrigated and forty acres of such land to each other member of said tribes, said allotments to be made prior to October first, nineteen hundred and three, on which date all the unallotted lands within said reservation shall be restored to the public domain: *Provided,* That persons entering any of said land under the homestead law shall pay therefor at the rate of one

Uintah and White River Utes.

Allotment of irrigable land.

Unallotted lands restored to public domain.

Provisos.

Homestead entries.

Mineral leases. dollar and twenty-five cents per acre: *And provided further*, That nothing herein contained shall impair the rights of any mineral lease which has been approved by the Secretary of the Interior, or any permit heretofore issued by direction of the Secretary of the Interior to negotiate with said Indians for a mineral lease; but any person or company having so obtained such approved mineral lease or such permit to negotiate with said Indians for a mineral lease on said reservation, pending such time and up to thirty days before said lands are restored to the public domain as aforesaid, shall have in lieu of such lease or permit the preferential right to locate under the mining laws not to exceed six hundred and forty acres of contiguous mineral land, except the Raven Mining Company, which may in lieu of its lease locate one hundred mining claims of the character of mineral mentioned in its lease; and the proceeds of the sale of the lands so restored to the public domain shall be applied, first, to the reimbursement of the United States for any moneys advanced to said Indians to carry into effect the foregoing provisions; and the remainder, under the direction of the Secretary of the Interior, shall be used for the benefit of said Indians.

* * * * *

AN ACT Defining what shall constitute and providing for assessments on oil mining claims.

Assessment required for oil mining claims. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That where oil lands are located under the provisions of title thirty-two, chapter six, Revised Statutes of the United States, as placer mining claims, the annual assessment labor upon such claims may be done upon any one of a group of claims lying contiguous and owned by the same person or corporation, not exceeding five claims in all: *Provided*, That said labor will tend to the development or to determine the oil-bearing character of such contiguous claims.

AN ACT Making appropriations for the current and contingent expenses of the Indian Department and for fulfilling treaty stipulations with various Indian tribes for the fiscal year ending June thirtieth, nineteen hundred and four, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

That in the lands within the former Uncompahgre Indian Reservation, in the State of Utah, containing gilsonite, asphaltum, elaterite, or other like substances, which were reserved from location and entry by provision in the act of Congress entitled "An act making appropriations for the current and contingent expenses of the Indian Department and for fulfilling treaty stipulations with various Indian tribes, for the fiscal year ending June thirtieth, eighteen hundred and ninety-eight, and for other purposes," approved June seventh, eighteen hundred and ninety-seven, all discoveries and locations of any such mineral lands by qualified persons prior to January first, eighteen hundred and ninety-one, not previously discovered and located, who recorded notices of such discoveries and locations prior to January first, eighteen hundred and ninety-one, either in the State of Colorado, or in the office of the county recorder of Uintah County, Utah, shall have all the force and effect accorded by law to locations of mining claims upon the public domain. All such locations may hereafter be perfected, and patents shall be issued therefor upon compliance with the requirements of the mineral-land laws, provided that the owners of such locations shall relocate their respective claims and record the same in the office of the county recorder of Uintah County, Utah, within ninety days after the passage of this act. All locations of any such mineral lands made and recorded on or subsequent to January first, eighteen hundred and ninety-one, are hereby declared to be null and void; and

Uncompahgre Indian Reservation.

Mining claims located on prior to Jan. 1, 1891, valid.

Patents to issue on relocations, etc., of claims.

Claims located after Jan. 1, 1891, invalid.

Sale of re- the remainder of the lands heretofore reserved as afore-
 mainder of said because of the mineral substances contained in them,
 mineral lands. insofar as the same may be within even-numbered sections,
 shall be sold and disposed of in tracts not exceeding forty
 acres, or a quarter of a quarter of a section, in such man-
 ner and upon such terms and with such restrictions as
 Restrictions. may be prescribed in a proclamation of the President of
 the United States issued for that purpose not less than one
 hundred and twenty days after the passage of this act,
 and not less than ninety days before the time of sale or
 disposal, and the balance of said lands and also all the
 mineral therein are hereby specifically reserved for future
 action of Congress.

* * * * *

**AN ACT For the survey and allotment of lands now em-
 braced within the limits of the Flathead Indian Reserva-
 tion, in the State of Montana, and the sale and disposal
 of all surplus lands after allotment.**

* * * * *

Classification, etc., of lands. SEC. 5. That said commissioners shall then proceed to
 personally inspect and classify and appraise, by the small-
 est legal subdivisions of forty acres each, all of the re-
 maining lands embraced within said reservation. In
 making such classification and appraisement said lands
 shall be divided into the following classes: First, agri-
 cultural land of the first class; second, agricultural land
 of the second class; third, timber lands, the same to be
 lands more valuable for their timber than for any other
 purpose; fourth, mineral lands; and fifth, grazing lands.

* * * * *

Disposal of lands. SEC. 8. That when said commission shall have completed
 the classification and appraisement of all of said lands
 and the same shall have been approved by the Secretary
 of the Interior, the land shall be disposed of under the
 provisions of the homestead, mineral, and town-site laws

of the United States, except such of said lands as shall have been classified as timber lands, and excepting sections sixteen and thirty-six of each township, which are hereby granted to the State of Montana for school purposes. * * *

Timber and school lands excepted.

* * * * *

SEC. 10. That only mineral entry may be made on such of said lands as said commission shall designate and classify as mineral under the general provisions of the mining laws of the United States, and mineral entry may also be made on any of said lands whether designated by said commission as mineral lands or otherwise, such classification by said commission being only prima facie evidence of the mineral or nonmineral character of the same: *Provided*, That no such mineral locations shall be permitted upon any lands allotted in severalty to an Indian.

Mineral land entries.

Proviso.
Exceptions.

AN ACT To ratify and amend an agreement with the Indians of the Crow Reservation; in Montana, and making appropriations to carry the same into effect.

* * * * *

SEC. 5. * * * *And provided further*, That the price of said lands shall be four dollars per acre, when entered under the homestead laws. * * * Lands entered under the town-site and mineral land laws shall be paid for in amount and manner as provided by said laws, but in no event at a less price than that fixed herein for such lands, if entered under the homestead laws. * * *

Town-site and mineral lands.

AN ACT To authorize the sale and disposition of surplus or unallotted lands of the Yakima Indian Reservation, in the State of Washington.

* * * * *

SEC. 3. That the residue of the lands of said reservation—that is, the lands not allotted and not reserved—shall be classified under the direction of the Secretary of the Interior as irrigable lands, grazing lands, timber lands,

Appraisal of unallotted lands, etc.

or arid lands, and shall be appraised under their appropriate classes by legal subdivisions, with the exception of the mineral lands, which need not be appraised, and the timber on the lands classified as timber lands shall be appraised separately from the land. The basis for the appraisal of the timber shall be the amount of standing merchantable timber thereon, which shall be ascertained and reported.

* * * * *

Mineral lands. The lands classified as mineral lands shall be subject to location and disposal under the mineral-land laws of the

Provisos. United States: *Provided*, That lands not classified as min-

Lands not classified as mineral lands. eral may also be located and entered as mineral lands, subject to approval by the Secretary of the Interior and

Restriction.

conditioned upon the payment, within one year from the date when located, of the appraised value of the lands per acre fixed prior to the date of such location, but at not less than the price fixed by existing law for mineral lands: *Provided further*, That no such mineral locations shall be permitted on any lands allotted to Indians in severalty or reserved for any purpose as herein authorized.

AN ACT To ratify and amend an agreement with the Indians residing on the Shoshone or Wind River Indian Reservation in the State of Wyoming and to make appropriations for carrying the same into effect.

* * * * *

Opening of lands to entry. SEC. 2. That the lands ceded to the United States under the said agreement shall be disposed of under the provisions of the homestead, town-site, coal, and mineral land

Proclamation. and entry by proclamation of the President. * * *

* * * * *

Town-site coal, and mineral entries. * * * Lands entered under the town-site, coal, and mineral land laws shall be paid for in amount and man-

ner as provided by said laws. Notice of location of all mineral entries shall be filed in the local land office of the district in which the lands covered by the location are situated, and unless entry and payment shall be made within three years from the date of location all rights thereunder shall cease; * * * that all lands, except mineral and coal lands, herein ceded remaining undisposed of at the expiration of five years from the opening of said lands to entry shall be sold to the highest bidder for cash at not less than one dollar per acre under rules and regulations to be prescribed by the Secretary of the Interior. * * *

AN ACT To authorize the sale and disposition of surplus or unallotted lands of the diminished Colville Indian Reservation, in the State of Washington, and for other purposes.

* * * * *

SEC. 3. That upon the completion of said allotments to said Indians the residue or surplus lands—that is, lands ^{Mineral} not allotted or reserved for Indian school, agency, or other purposes—of the said diminished Colville Indian Reservation shall be classified under the direction of the Secretary of the Interior as irrigable lands, grazing lands, timber lands, mineral lands, or arid lands, and shall be appraised under their appropriate classes by legal subdivisions, with the exception of the lands classed as mineral lands, which need not be appraised, and which shall be disposed of under the general mining laws of the United States.

AN ACT Making appropriations for the current and contingent expenses of the Indian Department, for fulfilling treaty stipulations with various Indian tribes, and for other purposes, for the fiscal year ending June thirtieth, nineteen hundred and seven.

[COEUR D'ALENE INDIAN LANDS.]

* * * * *

M i n e r a l * * * *Provided further,* That the general mining laws of the United States shall extend after the approval of this act to any of said lands, and mineral entry may be made on any of said lands, but no such mineral selection shall be permitted upon any lands allotted in severalty to the Indians: *Provided further,* That all the coal or oil deposits in or under the lands on the said reservation shall be and remain the property of the United States, and no patent that may be issued under the provisions of this or any other act of Congress shall convey any title thereto. * * *

AN ACT To amend the laws governing labor or improvements upon mining claims in Alaska.

Alaska. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That during each year and until patent has been issued therefor, at least one hundred dollars' worth of labor shall be performed or improvements made on, or for the benefit or development of, in accordance with existing law, each mining claim in the district of Alaska heretofore or hereafter located. And the locator or owner of such claim or some other person having knowledge of the facts may also make and file with the said recorder of the district in which the claims shall be situate an affidavit showing the performance of labor or making of improvements to the amount of one hundred dollars as aforesaid and specifying the character and extent of such work. Such affidavit shall set forth the following: First, the name or number of the mining claims and where situated; second, the number of days' work done and the character and value of the improvements placed thereon; third, the date of the performance of such labor and of making improvements; fourth, at whose instance the work was done or the improvements made; fifth, the actual amount paid for work and improvement, and by whom paid when the same was not done by the owner. Such affidavit shall be prima facie evidence of the performance of such work or making of such improvements, but if such affidavits be

not filed within the time fixed by this act the burden of proof shall be upon the claimant to establish the performance of such annual work and improvements. And upon failure of the locator or owner of any such claim to comply with the provisions of this act, as to performance of work and improvements, such claim shall become forfeited and open to location by others as if no location of the same had ever been made. The affidavits required hereby may be made before any officer authorized to administer oaths, and the provisions of section fifty-three hundred and ninety-two and fifty-three hundred and ninety-three of the Revised Statutes are hereby extended to such affidavits. Said affidavits shall be filed not later than ninety days after the close of the year in which such work is performed.

Forfeiture.

Officer before whom affidavits may be made.
R. S., secs. 5392, 5393, p. 1045.

Time of filing.

Fee.

SEC. 2. That the recorders for the several divisions or districts of Alaska shall collect the sum of one dollar and fifty cents as a fee for the filing, recording, and indexing said annual proofs of work and improvements for each claim so recorded.

AN ACT Authorizing a resurvey of certain townships in the State of Wyoming, and for other purposes.

[BITTER ROOT VALLEY, MONTANA.]

SEC. 11. That all the provisions of the mining laws of the United States are hereby extended and made applicable to the undisposed-of lands in the Bitter Root Valley, State of Montana, above the mouth of the Lo Lo Fork of the Bitter Root River, designated in the act of June fifth, eighteen hundred and seventy-two: *Provided*, That all mining locations and entries heretofore made or attempted to be made upon said lands shall be determined by the Department of the Interior as if said lands had been subject to mineral location and entry at the time such locations and entries were made or attempted to be made: *And provided further*, That this act shall not be applicable to lands withdrawn for administration sites for use of the Forest Service.

Mining laws extended to lands.

AN ACT For relief of applicants for mineral surveys.

Repayment
of deposits for
mineral sur-
veys.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to pay, out of the moneys heretofore or hereafter covered into the Treasury from deposits made by individuals to cover cost of work performed and to be performed in the offices of the United States surveyors-general in connection with the survey of mineral lands, any excess in the amount deposited over and above the actual cost of the work performed, including all expenses incident thereto for which the deposits were severally made or the whole of any unused deposit; and such sums, as the several cases may be, shall be deemed to be annually and permanently appropriated for that purpose. Such repayments shall be made to the person or persons who made the several deposits, or to his or their legal representatives, after the completion or abandonment of the work for which the deposits were made, and upon an account certified by the surveyor-general of the district in which the mineral land surveyed, or sought to be surveyed is situated and approved by the Commissioner of the General Land Office.

AN ACT Extending the time for final entry of mineral claims within the Shoshone or Wind River Reservation in Wyoming.

Time ex-
tended for mak-
ing entry.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section two of chapter fourteen hundred and fifty-two of the Statutes of the Fifty-eighth Congress (United States Statutes at Large, volume thirty-three, part one), being "An act to ratify and amend an agreement with the Indians residing on the Shoshone or Wind River Indian Reservation, in the State of Wyoming, and to make appropriations to carry the same into effect," be, and the same is hereby, amended so that all claimants and

locators of mineral lands within the ceded portion of said reservation shall have five years from the date of location within which to make entry and payment instead of three years, as now provided by the said act.

AN ACT Extending the time in which to file adverse claims and institute adverse suits against mineral entries in the district of Alaska.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in the district of Alaska adverse claims authorized and provided for in sections twenty-three hundred and twenty-five and twenty-three hundred and twenty-six, United States Revised Statutes, may be filed at any time during the sixty days period of publication or within eight months thereafter, and the adverse suits authorized and provided for in section twenty-three hundred and twenty-six, United States Revised Statutes, may be instituted at any time within sixty days after filing of said claims in the local land office.

Time extended for filing adverse mineral claims in Alaska.
Act of Congress, approved June 7, 1910.

* * * * *

AN ACT To authorize the President of the United States to make withdrawals of public lands in certain cases.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President may, at any time in his discretion, temporarily withdraw from settlement, location, sale, or entry any of the public lands of the United States including the district of Alaska, and reserve the same for water-power sites, irrigation, classification of lands, or other public purposes to be specified in the orders of withdrawals, and such withdrawals or reservations shall remain in force until revoked by him or by an Act of Congress.

Temporary withdrawals by President for power-sites, irrigation, etc., authorized.
Act of Congress, approved June 25, 1910.

SEC. 2. That all lands withdrawn under the provisions of this Act shall at all times be open to exploration, dis-

covery, occupation, and purchase, under the mining laws of the United States, so far as the same apply to minerals other than coal, oil, gas, and phosphates: *Provided*, That the rights of any person who, at the date of any order of withdrawal heretofore or hereafter made, is a bona fide occupant or claimant of oil or gas-bearing lands, and who, at such date, is in diligent prosecution of work leading to discovery of oil or gas, shall not be affected or impaired by such order, so long as such occupant or claimant shall continue in diligent prosecution of said work: *And provided further*, That this Act shall not be construed as a recognition, abridgment, or enlargement of any asserted rights or claims initiated upon any oil or gas-bearing lands after any withdrawal of such lands made prior to the passage of this Act: *And provided further*, That there shall be excepted from the force and effect of any withdrawal made under the provisions of this Act all lands which are, on the date of such withdrawal, embraced in any lawful homestead or desert-land entry theretofore made, or upon which any valid settlement has been made and is at said date being maintained and perfected pursuant to law; but the terms of this proviso shall not continue to apply to any particular tract of land unless the entryman or settler shall continue to comply with the law under which the entry or settlement was made: *And provided further*, That hereafter no forest reserve shall be created, nor shall any additions be made to one heretofore created within the limits of the States of Oregon, Washington, Idaho, Montana, Colorado, or Wyoming, except by Act of Congress.

SEC. 3. That the Secretary of the Interior shall report all such withdrawals to Congress at the beginning of its next regular session after the date of the withdrawals.

* * * * *

AN ACT To protect the locators in good faith of oil and gas lands who shall have effected an actual discovery of oil or gas on the public lands of the United States, or their successors in interest.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in no case shall patent be denied to or for any lands heretofore located or claimed under the mining laws of the United States containing petroleum, mineral oil, or gas solely because of any transfer or assignment thereof or of any interest or interests therein by the original locator or locators, or any of them, to any qualified persons or person, or corporation, prior to discovery of oil or gas therein, but if such claim is in all other respects valid and regular, patent therefor not exceeding one hundred and sixty acres in any one claim shall issue to the holder or holders thereof, as in other cases: *Provided, however,* That such lands were not at the time of inception of development on or under such claim withdrawn from mineral entry.

Protection of
oil locators.
Act of Con-
gress, approved
March 2, 1911.

NEW PLACER LAW FOR ALASKA

Congress on August 1, 1912, passed the following Act effective on all placer locations in Alaska made on and after that date. It contains many details and should be carefully studied by those operating in that territory. It is in no way effective on placer locations made before that date, or on lode locations of any date. However, all placer locations will be closely scrutinized as to what law they come under, especially when application for patent is made.

AN ACT To modify and amend the mining laws in their application to the Territory of Alaska, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, Alaska.
That no association placer-mining claim shall hereafter be located in Alaska in excess of forty acres, and on every placer-mining claim hereafter located in Alaska, and until patent has been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year, including the year of location, for each and every twenty acres or excess fraction thereof. Assessment required.

SEC. 2. That no person shall hereafter locate any placer-mining claim in Alaska as attorney for another unless he is duly authorized thereto by a power of attorney in writing, duly acknowledged and recorded in any recorder's office in the judicial division where the location is made. Any person so authorized may locate placer-mining claims for not more than two individuals or one association under such power of attorney, but no such agent or attorney shall be authorized or permitted to locate more than two placer-mining claims for any one principal or association during Location by attorneys.

Restrictions.

any calendar month, and no placer-mining claim shall hereafter be located in Alaska except under the limitations of this act.

Number of locations limited. SEC. 3. That no person shall hereafter locate, cause or procure to be located, for himself more than two placer-mining claims in any calendar month: *Provided*, That one or both of such locations may be included in an association claim.

Area of claims. SEC. 4. That no placer-mining claim hereafter located in Alaska shall be patented which shall contain a greater area than is fixed by law, nor which is longer than three times its greatest width.

Effect of violation. SEC. 5. That any placer-mining claim attempted to be located in violation of this act shall be null and void, and the whole area thereof may be located by any qualified locator as if no such prior attempt had been made.

Act of Congress, approved Aug. 1, 1912.

REGULATIONS.

NATURE AND EXTENT OF MINING CLAIMS.

1. Mining claims are of two distinct classes: Lode claims and placers.

LODE CLAIMS.

2. The status of lode claims located or patented previous to the 10th day of May, 1872, is not changed with regard to their extent along the lode or width of surface but the claim is enlarged by sections 2322 and 2328, by investing the locator, his heirs or assigns, with the right to follow, upon the conditions stated therein, all veins, lodes, or ledges, the top or apex of which lies inside of the surface lines of his claim.

3. It is to be distinctly understood, however, that the law limits the possessory right to veins, lodes, or ledges, *other* than the one named in the original location, to such as were not *adversely claimed on May 10, 1872*, and that where such other vein or ledge was so adversely claimed at that date the right of the party so adversely claiming is in no way impaired by the provisions of the Revised Statutes.

4. From and after the 10th May, 1872, any person who is a citizen of the United States, or who has declared his intention to become a citizen, may locate, record, and hold a mining claim of *fifteen hundred linear feet* along the course of any mineral vein or lode subject to location; or an association of persons, severally qualified as above, may make joint location of such claim of *fifteen hundred feet*, but in no event can a location of a vein or lode made after the 10th day of May, 1872, exceed fifteen hundred feet along the course thereof, whatever may be the number of persons composing the association.

5. With regard to the extent of surface ground adjoining a vein or lode, and claimed for the convenient working thereof, the Revised Statutes provide that the lateral extent of locations

of veins or lodes made after May 10, 1872, shall in no case exceed three hundred feet on each side of the middle of the vein at the surface, and that no such surface rights shall be limited by any mining regulations to less than twenty-five feet on each side of the middle of the vein at the surface, except where adverse rights existing on the 10th May, 1872, may render such limitation necessary; the end lines of such claims to be in all cases parallel to each other. Said lateral measurements can not extend beyond three hundred feet on either side of the middle of the vein at the surface, or such distance as is allowed by local laws. For example: 400 feet can not be taken on one side and 200 feet on the other. If, however, 300 feet on each side are allowed, and by reason of prior claims but 100 feet can be taken on one side, the locator will not be restricted to less than 300 feet on the other side; and when the locator does not determine by exploration *where* the middle of the vein at the surface is, his discovery shaft must be assumed to mark such point.

6. By the foregoing it will be perceived that no lode claim located after the 10th of May, 1872, can exceed a parallelogram fifteen hundred feet in length by six hundred feet in width, but whether surface ground of that width can be taken depends upon the local regulations or State or Territorial laws in force in the several mining districts; and that no such local regulations or State or Territorial laws shall limit a vein or lode claim to less than fifteen hundred feet along the course thereof, whether the location is made by one or more persons, nor can surface rights be limited to less than fifty feet in width unless adverse claims existing on the 10th day of May, 1872, render such lateral limitation necessary.

7. Locators can not exercise too much care in defining their locations at the outset, inasmuch as the law requires that all records of mining locations made subsequent to May 10, 1872, shall contain the name or names of the locators, the date of the location, and such a *description of the claim or claims* located, by reference to some natural object or permanent monument, as will identify the claim.

8. No lode claim shall be located until after the discovery

of a vein or lode within the limits of the claim, the object of which provision is evidently to prevent the appropriation of presumed mineral ground for speculative purposes, to the exclusion of *bona fide* prospectors, before sufficient work has been done to determine whether a vein or lode really exists.

9. The claimant should, therefore, prior to locating his claim, unless the vein can be traced upon the surface, sink a shaft or run a tunnel or drift to a sufficient depth therein to discover and develop a mineral-bearing vein, lode, or crevice; should determine, if possible, the general course of such vein in either direction from the point of discovery, by which direction he will be governed in marking the boundaries of his claim on the surface. His location notice should give the course and distance as nearly as practicable from the discovery shaft on the claim to some permanent, well-known points or objects, such, for instance, as stone monuments, blazed trees, the confluence of streams, point of intersection of well-known gulches, ravines, or roads, prominent buttes, hills, etc., which may be in the immediate vicinity, and which will serve to perpetuate and fix the *locus* of the claim and render it susceptible of identification from the description thereof given in the record of locations in the district, and should be duly recorded.

10. In addition to the foregoing data, the claimant should state the names of adjoining claims, or, if none adjoin, the relative positions of the nearest claims; should drive a post or erect a monument of stones at each corner of his surface ground, and at the point of discovery or discovery shaft should fix a post, stake, or board, upon which should be designated the name of the lode, the name or names of the locators, the number of feet claimed, and in which direction from the point of discovery, it being essential that the location notice filed for record, in addition to the foregoing description, should state whether the entire claim of fifteen hundred feet is taken on one side of the point of discovery, or whether it is partly upon one and partly upon the other side thereof, and in the latter case, how many feet are claimed upon each side of such discovery point.

11. The location notice must be filed for record in all re-

spects as required by the State or Territorial laws and local rules and regulations, if there be any.

12. In order to hold the possessory title to a mining claim located prior to May 10, 1872, the law requires that *ten dollars* shall be expended annually in labor or improvements for each *one hundred feet* in length along the vein or lode. In order to hold the possessory right to a location made since May 10, 1872, not less than one hundred dollars' worth of labor must be performed or improvements made thereon annually. Under the provisions of the act of Congress approved January 22, 1880, the first annual expenditure becomes due and must be performed during the calendar year succeeding that in which the location was made. Where a number of contiguous claims are held in common, the aggregate expenditure that would be necessary to hold all the claims, may be made upon any one claim. Cornering locations are held not to be contiguous.

13. Failure to make the expenditure or perform the labor required upon a location made before or since May 10, 1872, will subject a claim to relocation, unless the original locator, his heirs, assigns, or legal representatives have resumed work after such failure and before relocation.

14. Annual expenditure is not required subsequent to entry, the date of issuing the patent certificate being the date contemplated by statute.

15. Upon the failure of any one of several co-owners to contribute his portion of the required expenditures, the co-owners, who have performed the labor or made the improvements as required, may, at the expiration of the year, give such delinquent co-owner personal notice in writing, or notice by publication in the newspaper published nearest the claim for at least once a week for ninety days; and if upon the expiration of ninety days after such notice in writing, or upon the expiration of one hundred and eighty days after the first newspaper publication of notice, the delinquent co-owner shall have failed to contribute his proportion to meet such expenditures or improvements, his interest in the claim by law passes to his co-owners who have made the expenditures or improvements as

aforesaid. Where a claimant alleges ownership of a forfeited interest under the foregoing provision, the sworn statement of the publisher as to the facts of publication, giving dates and a printed copy of the notice published, should be furnished, and the claimant must swear that the delinquent coowner failed to contribute his proper proportion within the period fixed by the statute.

TUNNELS.

16. The effect of section 2323, Revised Statutes, is to give the proprietors of a mining tunnel run in good faith the possessory right to fifteen hundred feet of any blind lodes cut, discovered, or intersected by such tunnel, which were not previously known to exist, within three thousand feet from the face or point of commencement of such tunnel, and to prohibit other parties, after the commencement of the tunnel, from prospecting for and making locations of lodes on the *line thereof* and within said distance of three thousand feet, unless such lodes appear upon the surface or were previously known to exist. The term "face," as used in said section, is construed and held to mean the first working face formed in the tunnel, and to signify the point at which the tunnel actually enters cover; it being from this point that the three thousand feet are to be counted upon which prospecting is prohibited as aforesaid.

17. To avail themselves of the benefits of this provision of law, the proprietors of a mining tunnel will be required, at the time they enter cover as aforesaid, to give proper notice of their tunnel location by erecting a substantial post, board, or monument at the face or point of commencement thereof, upon which should be posted a good and sufficient notice, giving the names of the parties or company claiming the tunnel right; the actual or proposed course or direction of the tunnel, the height and width thereof, and the course and distance from such face or point of commencement to some permanent well-known objects in the vicinity by which to fix and determine the locus in manner heretofore set forth applicable to locations of veins or lodes, and at the time of posting such notice they shall, in order that miners or prospectors may be enabled to determine

whether or not they are within the lines of the tunnel, establish the boundary lines thereof, by stakes or monuments placed along such lines at proper intervals, to the terminus of the three thousand feet from the face or point of commencement of the tunnel, and the lines so marked will define and govern as to specific boundaries within which prospecting for lodes not previously known to exist is prohibited while work on the tunnel is being prosecuted with reasonable diligence.

18. A full and correct copy of such notice of location defining the tunnel claim must be filed for record with the mining recorder of the district, to which notice must be attached the sworn statement or declaration of the owners, claimants, or projectors of such tunnel, setting forth the facts in the case; stating the amount expended by themselves and their predecessors in interest in prosecuting work thereon; the extent of the work performed, and that it is *bona fide* their intention to prosecute work on the tunnel so located and described with reasonable diligence for the development of a vein or lode, or for the discovery of mines, or both, as the case may be. This notice of location must be duly recorded, and, with the said sworn statement attached, kept on the recorder's files for future reference.

PLACER CLAIMS.

19. But one discovery of mineral is required to support a placer location, whether it be of twenty acres by an individual, or of one hundred and sixty acres or less by an association of persons.

20. The act of August 4, 1892, extends the mineral-land laws so as to bring lands chiefly valuable for building stone within the provisions of said law by authorizing a placer entry of such lands. Registers and receivers should make a reference to said act on the entry papers in the case of all placer entries made for lands containing stone chiefly valuable for building purposes. Lands reserved for the benefit of public schools or donated to any State are not subject to entry under said act.

21. The act of February 11, 1897, provides for the location and entry of public lands chiefly valuable for petroleum or

other mineral oils, and entries of that nature made prior to the passage of said act are to be considered as though made thereunder.

22. By section 2330 authority is given for subdividing forty-acre legal subdivisions into ten-acre tracts. These ten-acre tracts should be considered and dealt with as legal subdivisions, and an applicant having a placer claim which conforms to one or more of such ten-acre tracts, contiguous in case of two or more tracts, may make entry thereof, after the usual proceedings, without further survey or plat.

23. [Omitted.]

24. A ten-acre subdivision may be described, for instance, if situated in the extreme northeast of the section, as the "NE. $\frac{1}{4}$ of the NE. $\frac{1}{4}$ of the NE. $\frac{1}{4}$ " of the section, or, in like manner, by appropriate terms, wherever situated; but, in addition to this description, the notice must give all the other data required in a mineral application, by which parties may be put on inquiry as to the land sought to be patented. The proofs submitted with applications must show clearly the character and extent of the improvements upon the premises.

25. The proof of improvements must show their value to be not less than *five hundred dollars* and that they were made by the applicant for patent or his grantors. This proof should consist of the affidavit of two or more disinterested witnesses. The annual expenditure to the amount of \$100, required by section 2324, Revised Statutes, must be made upon placer as well as lode locations.

26. Applicants for patent to a placer claim, who are also in possession of a known vein or lode included therein, must state in their application that the placer includes such vein or lode. The published and posted notices must also include such statement. If veins or lodes lying within a placer location are owned by other parties, the fact should be distinctly stated in the application for patent and in all the notices. But in all cases, whether the lode is claimed or excluded, it must be surveyed and marked upon the plat, the field notes and plat giving the area of the lode claim or claims and the area of the placer separately. An application which omits to claim

such known vein or lode must be construed as a conclusive declaration that the applicant has no right of possession to the vein or lode. Where there is no known lode or vein, the fact must appear by the affidavit of two or more witnesses.

27. By section 2330 it is declared that no location of a placer claim, made after July 9, 1870, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States Surveys.

28. Section 2331 provides that all placer-mining claims located after May 10, 1872, shall conform as nearly as practicable with the United States system of public land surveys and the rectangular subdivisions of such surveys, and such locations shall not include more than twenty acres for each individual claimant.

29. The foregoing provisions of law are construed to mean that after the 9th day of July, 1870, no location of a placer claim can be made to exceed one hundred and sixty acres, whatever may be the number of locators associated together, or whatever the local regulations of the district may allow; and that from and after May 10, 1872, no location can exceed twenty acres for each individual participating therein; that is, a location by two persons can not exceed forty acres, and one by three persons can not exceed sixty acres.

30. The regulations hereinbefore given as to the manner of marking locations on the ground, and placing the same on record, must be observed in the case of placer locations so far as the same are applicable, the law requiring, however, that all placer-mining claims located after May 10, 1872, shall conform as near as practicable with the United States system of public land surveys and the rectangular subdivisions of such surveys, whether the locations are upon surveyed or unsurveyed lands.

Conformity to the public land surveys and the rectangular subdivisions thereof will not be required where compliance with such requirement would necessitate the placing of the lines thereof upon other prior located claims or where the claim is surrounded by prior locations.

Where a placer location by one or two persons can be entirely included within a square forty-acre tract, by three or

four persons within two square forty-acre tracts placed end to end, by five or six persons within three square forty-acre tracts and by seven or eight persons within four square forty-acre tracts, such locations will be regarded as within the requirements where strict conformity is impracticable.

Whether a placer location conforms reasonably with the legal subdivisions of the public surveys is a question of fact to be determined in each case and no location will be passed to patent without satisfactory evidence in this regard. Claimants should bear in mind that it is the policy of the Government to have all entries whether of agricultural or mineral lands as compact and regular in form as reasonably practicable, and that it will not permit or sanction entries or locations which cut the public domain into long narrow strips or grossly irregular or fantastically shaped tracts. (Snow Flake Fraction Placer 37 L. D., 250.)

REGULATIONS UNDER SALINE ACT.

31. Under the act approved January 31, 1901, extending the mining laws to saline lands, the provisions of the law relating to placer-mining claims are extended to all States and Territories and the district of Alaska, so as to permit the location and purchase thereunder of all unoccupied public lands containing salt springs, or deposits of salt in any form, and chiefly valuable therefor, with the proviso, "That the same person shall not locate or enter more than one claim hereunder."

32. Rights obtained by location under the placer-mining laws are assignable, and the assignee may make the entry in his own name; so, under this act a person holding as assignee may make entry in his own name: *Provided*, He has not held under this act, at any time, either as locator or entryman, any other lands; his right is exhausted by having held under this act any particular tract, either as locator or entryman, either as an individual or as a member of an association. It follows, therefore, that no application for patent or entry, made under this act, shall embrace more than one single location.

33. In order that the conditions imposed by the proviso, as set forth in the above paragraph, may duly appear, the notice

of location presented for record and the application for patent must each contain a specific statement under oath by each person whose name appears therein that he never has, either as an individual or as a member of an association, located or entered any other lands under the provisions of this act. Assignments made by persons who are not severally qualified as herein stated will not be recognized.

PROCEDURE TO OBTAIN PATENT TO MINERAL LANDS.

LODE CLAIMS.

34. The claimant is required, in the first place, to have a correct survey of his claim made under authority of the surveyor-general of the State or Territory in which the claim lies, such survey to show with accuracy the exterior surface boundaries of the claim, which boundaries are required to be distinctly marked by monuments on the ground. Four plats and one copy of the original field notes in each case will be prepared by the surveyor-general; one plat and the original field notes to be retained in the office of the surveyor-general; one copy of the plat to be given the claimant for posting upon the claim; one plat and a copy of the field notes to be given the claimant for filing with the proper register, to be finally transmitted by that officer, with other papers in the case, to this office, and one plat to be sent by the surveyor-general to the register of the proper land district, to be retained on his files for future reference. As there is no resident surveyor-general for the State of Arkansas, applications for the survey of mineral claims in said State should be made to the Commissioner of this office, who, under the law, is *ex officio* the U. S. surveyor-general.

35. The survey and plat of mineral claims required to be filed in the proper land office with application for patent must be made subsequent to the recording of the location of the claim (if the laws of the State or Territory or the regulations of the mining district require the notice of location to be recorded), and when the original location is made by survey

of a United States mineral surveyor such location survey can not be substituted for that required by the statute, as above indicated.

36. The surveyors-general should designate all surveyed mineral claims by a progressive series of numbers, beginning with survey No. 37, irrespective as to whether they are situated on surveyed or unsurveyed lands, the claim to be so designated at date of issuing the order therefor, in addition to the local designation of the claim; it being required in all cases that the plat and field notes of the survey of a claim must, in addition to the reference to permanent objects in the neighborhood, describe the locus of the claim with reference to the lines of public surveys by a line connecting a corner of the claim with the nearest public corner of the United States surveys, unless such claim be on unsurveyed lands at a distance of more than two miles from such public corner, in which latter case it should be connected with a United States mineral monument. Such connecting line must not be more than *two miles* in length, and should be measured on the ground direct between the points, or calculated from actually surveyed traverse lines if the nature of the country should not permit direct measurement. If a regularly established survey corner is within two miles of a claim situated on unsurveyed lands, the connection should be made with such corner in preference to a connection with a United States mineral monument. The connecting line or traverse line must be surveyed by the mineral surveyor at the time of his making the particular survey and be made a part thereof.

37. (a) Promptly upon the approval of a mineral survey the surveyor-general will advise both this office and the appropriate local land office, by letter (Form 4-286), of the date of approval, number of the survey, name and area of the claim, name and survey number of each approved mineral survey with which actually in conflict, name and address of the applicant for survey, and name of the mineral surveyor who made the survey; and will also briefly describe therein the *locus* of the claim, specifying each legal subdivision or portion thereof, when upon surveyed lands, covered in whole or in part by the survey;

but hereafter no segregation of any such claim upon the official township-survey records will be made until mineral entry has been made and approved for patent, unless otherwise directed by this office.

(b) Upon application to make agricultural entry of the residue of any original lot or legal subdivision of forty acres, reduced by mining claims for which patent applications have been filed and which residue has been already reallocated in accordance therewith, the local officers will accept and approve the application as usual, if found to be regular. When such an application is filed for any such original lot or subdivision, reduced in available area by duly asserted mining claims but not yet reallocated accordingly, the local officers will promptly advise this office thereof; and will also report and identify any pending application for mineral patent affecting such subdivision which the agricultural applicant does not desire to contest. The surveyor-general will thereupon be advised by this office of such mining claims, or portions thereof, as are proper to be segregated, and directed to at once prepare, upon the usual drawing-paper township blank, diagram of amended township survey of such original lot or legal forty-acre subdivision so made fractional by such mineral segregation, designating the agricultural portion by appropriate lot number, beginning with No. 1 in each section and giving the area of each lot, and will forthwith transmit one approved copy to the local land office and one to this office. In the meantime the local officers will accept the agricultural application (if no other objection appears), suspend it with reservation of all rights of the applicant if continuously asserted by him, and upon receipt of amended township diagram will approve the application (if then otherwise satisfactory) as of the date of filing, corrected to describe the tract as designated in the amended survey.

(c) The register and receiver will allow no agricultural claim for any portion of an original lot or legal forty-acre subdivision, where the reduced area is made to appear by reason of approved surveys of mining claims and for which applications for patent have not been filed, until there is submitted by such agricultural applicant a satisfactory showing that such surveyed

claims are in fact mineral in character; and applications to have lands asserted to be mineral, or mining locations, segregated by survey, with the view to agricultural appropriation of the remainder, will be made to the register and receiver for submission to the Commissioner of the General Land Office, for his consideration and direction, and must be supported by the affidavit of the party in interest, duly corroborated by two or more disinterested persons, or by such other or further evidence as may be required in any case, that the lands sought to be segregated *as mineral* are in fact mineral in character; otherwise, in the absence of satisfactory showing in any such case, such original lot or legal subdivision will be subject to agricultural appropriation only. When any such showing shall be found to be satisfactory and the necessary survey is had, amended township diagram will be required and made as prescribed in the preceding section.

38. The following particulars should be observed in the survey of every mining claim:

(1) The exterior boundaries of the claim, the number of feet claimed along the vein, and, as nearly as can be ascertained, the direction of the vein, and the number of feet claimed on the vein in each direction from the point of discovery or other well-defined place on the claim should be represented on the plat of survey and in the field notes.

(2) The intersection of the lines of the survey with the lines of conflicting prior surveys should be noted in the field notes and represented upon the plat.

(3) Conflicts with unsurveyed claims, where the applicant for surveys does not claim the area in conflict, should be shown by actual survey.

(4) The total area of the claim embraced by the exterior boundaries should be stated, and also the area in conflict with each intersecting survey, substantially as follows:

	Acres.
Total area of claim.....	10.50
Area in conflict with survey No. 302.....	1.56
Area in conflict with survey No. 948.....	2.33
Area in conflict with Mountain Maid lode mining claim, unsurveyed	1.48

It does not follow that because mining surveys are required to exhibit all conflicts with prior surveys the areas of conflict are to be excluded. The field notes and plat are made a part of the application for patent, and care should be taken that the description does not inadvertently exclude portions intended to be retained. The application for patent should state the portions to be excluded in express terms.

39. The claimant is then required to post a copy of the plat of such survey in a conspicuous place upon the claim, together with notice of his intention to apply for a patent therefor, which notice will give the date of posting, the name of the claimant, the name of the claim, the number of the survey, the mining district and county, and the names of adjoining and conflicting claims as shown by the plat survey. Too much care can not be exercised in the preparation of this notice, inasmuch as the data therein are to be repeated in the other notices required by the statute, and upon the accuracy and completeness of these notices will depend in a great measure, the regularity and validity of the proceedings for patent.

40. After posting the said plat and notice upon the premises, the claimant will file with the proper register and receiver a copy of such plat and the field notes of survey of the claim, accompanied by the affidavit of at least two credible witnesses that such plat and notice are posted conspicuously upon the claim, giving the date and place of such posting; a copy of the *notice* so posted to be attached to and form a part of said affidavit.

41. Accompanying the field notes so filed must be the sworn statement of the claimant that he has the possessory right to the premises therein described, in virtue of a compliance by himself (and by his grantors, if he claims by purchase) with the mining rules, regulations, and customs of the mining district, State, or Territory in which the claim lies, and with the mining laws of Congress; such sworn statement to narrate briefly, but as clearly as possible, the facts constituting such compliance, the origin of his possession and the basis of his claim to a patent. The vein or lode must be fully described, the description to include a statement as to the kind and

character of mineral, the extent thereof, whether ore has been extracted and of what amount and value and such other facts as will support the applicant's allegation that the claim contains valuable mineral deposit.

42. This sworn statement must be supported by a copy of each location notice, certified by the legal custodian of the record thereof, and also by an abstract of title of each claim, completed to the date of filing said statement and certified by the legal custodian of the records of transfers, or by a duly authorized abstracter of titles. The certificate must state that no conveyances affecting the title to the claim or claims appear of record other than those set forth.

Abstracters will be required to attach to each abstract certified by them a certificate stating that they have filed in the office of the Commissioner of the General Land Office a certified copy of the existing statute by which they are authorized to compile abstracts of title, and evidence in the form of a certificate by the proper State, Territorial, or county officer that they have complied with the requirements of such statute.

43. In the event of the mining records in any case having been destroyed by fire or otherwise lost, affidavit of the fact should be made, and secondary evidence of possessory title will be received, which may consist of the affidavit of the claimant, supported by those of any other parties cognizant of the facts relative to his location, occupancy, possession, improvements, etc.; and in such case of lost records, any deeds, certificates of location or purchase, or other evidence which may be in the claimant's possession and tend to establish his claim, should be filed.

44. Before receiving and filing an application for mineral patent local officers will be particular to see that it includes no land which is embraced in a prior or pending application for patent or entry, or for any lands embraced in a railroad selection, or for which publication is pending or has been made by any other claimants, and if, in their opinion, after investigation, it should appear that a mineral application should not, for these or other reasons, be accepted and filed, they should formally reject the same, giving the reasons therefor,

and allow the applicant thirty days for appeal to this office under the Rules of Practice.

Local officers will give prompt and appropriate notice to the railroad grantee of the filing of every application for mineral patent which embraces any portion of an odd-numbered section of surveyed lands within the primary limits of a railroad land grant, and of *every* such application embracing *any* portion of unsurveyed lands within such limits (except as to any such application which embraces a portion or portions of those ascertained or prospective odd-numbered sections only, within the limits of the grant in Montana and Idaho to the Northern Pacific Railroad Company, which have been classified as mineral under the act of February 26, 1895, without protest by the company within the time limited by the statute or the mineral classification whereof has been approved).

Should the railroad grantee file protest and apply for a hearing to determine the character of the land involved in any such application for mineral patent, proceedings thereunder will be had in the usual manner.

Any application for mineral patent, however, which embraces lands previously listed or selected by a railroad company will be disposed of as provided by the first section of this paragraph, and the applicant afforded opportunity to protest and apply for a hearing or to appeal.

Notice should be given to the duly authorized representative of the railroad grantee, in accordance with rule 17 of Practice. When the claims applied for are upon unsurveyed land, the burden of proving that they are situate within prospective odd-numbered sections will rest upon the railroad.

Evidence of service of notice should be filed with the record in each case.

45. Upon the receipt of these papers, if no reason appears for rejecting the application, the register will, at the expense of the claimant (who must furnish the agreement of the publisher to hold applicant for patent alone responsible for charges of publication), publish a notice of such application for the period of sixty days in a newspaper published nearest to the claim, and will post a copy of such notice in his office for the

same period. When the notice is published in a *weekly* newspaper, nine consecutive insertions are necessary; when in a *daily* newspaper, the notice must appear in each issue for sixty-one consecutive issues. In both cases the first day of issue must be excluded in estimating the period of sixty days.

46. The notices so published and posted must embrace all the data given in the notice posted upon the claim. In addition to such data the published notice must further indicate the locus of the claim by giving the connecting line, as shown by the field notes and plat, between a corner of the claim and a United States mineral monument or a corner of the public survey, and thence the boundaries of the claim by courses and distances.

47. The register shall publish the notice of application for patent in a paper of established character and general circulation, to be by him designated as being the newspaper published nearest the land.

48. The claimant at the time of filing the application for patent, or at any time within the sixty days of publication, is required to file with the register a certificate of the surveyor-general that not less than five hundred dollars' worth of labor has been expended or improvements made, by the applicant or his grantors, upon each location embraced in the application, or if the application embraces several contiguous locations held in common, that an amount equal to five hundred dollars for each location has been so expended upon, and for the benefit of, the entire group; that the plat filed by the claimant is correct; that the field notes of the survey, as filed, furnish such an accurate description of the claim as will, if incorporated in a patent, serve to fully identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the *locus* thereof: *Provided*, That as to all applications for patents made and passed to entry before July 1, 1898, or which are by protests or adverse claims prevented from being passed to entry before that time, where the application embraces several locations held in common, proof of an expenditure of five hundred dollars upon the group will be sufficient, and an expenditure of that amount

need not be shown to have been made upon, or for the benefit of, each location embraced in the application.

49. The surveyor-general may derive his information upon which to base his certificate as to the value of labor expended or improvements made from the mineral surveyor who makes the actual survey and examination upon the premises, and such mineral surveyor should specify with particularity and full detail the character and extent of such improvements, but further or other evidence may be required in any case.

50. It will be convenient to have this certificate indorsed by the surveyor-general, both upon the plat and field notes of survey filed by the claimant as aforesaid.

51. After the sixty days' period of newspaper publication has expired, the claimant will furnish from the office of publication a sworn statement that the notice was published for the statutory period, giving the first and last day of such publication, and his own affidavit showing that the plat and notice aforesaid remained conspicuously posted upon the claim sought to be patented during said sixty days' publication, giving the dates.

52. Upon the filing of this affidavit the register will, if no adverse claim was filed in his office during the period of publication, and no other objection appears, permit the claimant to pay for the land to which he is entitled at the rate of five dollars for each acre and five dollars for each fractional part of an acre, except as otherwise provided by law, the receiver issuing the usual receipt therefor. The claimant will also make a sworn statement of all charges and fees paid by him for publication and surveys, together with all fees and money paid the register and receiver of the land office, after which the complete record will be forwarded to the Commissioner of the General Land Office and a patent issued thereon if found regular.

53. At any time prior to the issuance of patent protest may be filed against the patenting of the claim as applied for, upon any ground tending to show that the applicant has failed to comply with the law in any matter essential to a valid entry under the patent proceedings. Such protest can not, however, be made the means of preserving a surface conflict lost by failure to adverse or lost by the judgment of the court in an

adverse suit. One holding a present joint interest in a mineral location included in an application for patent who is excluded from the application, so that his interest would not be protected by the issue of patent thereon, may protest against the issuance of a patent as applied for, setting forth in such protest the nature and extent of his interest in such location, and such a protestant will be deemed a party in interest entitled to appeal. This results from the holding that a co-owner excluded from an application for patent does not have an "adverse" claim within the meaning of sections 2325 and 2326 of the Revised Statutes. (See *Turner v. Sawyer*, 150 U. S., 578-586.)

54. Any party applying for patent as *trustee* must disclose fully the nature of the trust and the name of the *cestui que trust*; and such trustee, as well as the beneficiaries, must furnish satisfactory proof of citizenship; and the names of beneficiaries, as well as that of the trustee, must be inserted in the final certificate of entry.

55. The annual expenditure of one hundred dollars in labor or improvements on a mining claim, required by section 2324 of the Revised Statutes, is solely a matter between rival or adverse claimants to the same mineral land, and goes only to the right of possession, the determination of which is committed exclusively to the courts.

56. The failure of an applicant for patent to a mining claim to prosecute his application to completion, by filing the necessary proofs and making payment for the land, within a reasonable time after the expiration of the period of publication of notice of the application, or after the termination of adverse proceedings in the courts, constitutes a waiver by the applicant of all rights obtained by the earlier proceedings upon the application.

57. The proceedings necessary to the completion of an application for patent to a mining claim, against which an adverse claim or protest has been filed, if taken by the applicant at the first opportunity afforded therefor under the law and departmental practice, will be as effective as if taken at the date

when, but for the adverse claim or protest, the proceedings on the application could have been completed.

PLACER CLAIMS.

58. The proceedings to obtain patents for placer claims, including all forms of mineral deposits excepting veins of quartz or other rock in place, are similar to the proceedings prescribed for obtaining patents for vein or lode claims; but where a placer claim shall be upon surveyed lands, and conforms to legal subdivisions, no further survey or plat will be required. Where placer claims can not be conformed to legal subdivisions, survey and plat shall be made as on unsurveyed lands.

59. The proceedings for obtaining patents for veins or lodes having already been fully given, it will not be necessary to repeat them here, it being thought that careful attention thereto by applicants and the local officers will enable them to act understandingly in the matter, and make such slight modifications in the notice, or otherwise, as may be necessary in view of the different nature of the two classes of claims; the price of the placer claims being fixed, however, at two dollars and fifty cents per acre or fractional part of an acre.

60. In placer applications, in addition to the recitals necessary in and to both vein or lode and placer applications, the placer application should contain, in detail, such data as will support the claim that the land applied for is placer ground containing valuable mineral deposits not in vein or lode formation and that title is sought not to control water courses or to obtain valuable timber but in good faith because of the mineral therein. This statement, of course, must depend upon the character of the deposit and the natural features of the ground, but the following details should be covered as fully as possible: If the claim be for a deposit of placer gold, there must be stated the yield per pan, or cubic yard, as shown by prospecting and development work, distance to bedrock, formation and extent of the deposit, and all other facts upon which he bases his allegation that the claim is valuable for its deposits of placer gold. If it be a building stone or other deposit than gold claimed under the placer laws, he must describe fully

the kind, nature, and extent of the deposit, stating the reasons why same is by him regarded as a valuable mineral claim. He will also be required to describe fully the natural features of the claim; streams, if any, must be fully described as to their course, amount of water carried, fall within the claim; and he must state kind and amount of timber and other vegetation thereon and adaptability to mining or other uses.

If the claim be all placer ground, that fact must be stated in the application and corroborated by accompanying proofs; if of mixed placers and lodes, it should be so set out, with a description of all known lodes situated within the boundaries of the claim. A specific declaration, such as is required by section 2333, Revised Statutes, must be furnished as to each lode intended to be claimed. All other known lodes are, by the silence of the applicant excluded by law from all claim by him, of whatsoever nature, possessory or otherwise.

While this data is required as a part of the mineral surveyor's report under paragraph 167, in case of placers taken by special survey, it is proper that the application for patent incorporate these facts under the oath of the claimant.

Inasmuch as in case of claims taken by legal subdivisions, no report by a mineral surveyor is required, the claimant, in his application in addition to the data above required, should describe in detail the shafts, cuts, tunnels, or other workings claimed as improvements, giving their dimensions, value, and the course and distance thereof to the nearest corner of the public surveys.

As prescribed by paragraph 25, this statement as to the description and value of the improvements must be corroborated by the affidavits of two disinterested witnesses.

Applications awaiting entry, whether published or not, must be made to conform to these regulations, with respect to proof as to the character of the land. Entries already made will be suspended for such additional proofs as may be deemed necessary in each case.

Local land officers are instructed that if the proofs submitted in placer applications under this paragraph are not satisfactory as showing the land as a whole to be placer in character, or

if the claims impinge upon or embrace water courses or bodies of water, and thus raise a doubt as to the *bona fides* of the location and application, or the character and extent of the deposit claimed thereunder, to call for further evidence, or if deemed necessary, request the specific attention of the Chief of Field Service thereto in connection with the usual notification to him under the circular instructions of April 24, 1907, and suspend further action on the application until a report thereon is received from the field officer.

MILL SITES.

61. Land entered as a mill site must be shown to be non-mineral. Mill sites are simply auxiliary to the working of mineral claims, and as section 2337, which provides for the patenting of mill sites, is embraced in the chapter of the Revised Statutes relating to mineral lands, they are therefore included in this circular.

62. To avail themselves of this provision of law, parties holding the possessory right to a vein or lode claim, and to a piece of nonmineral land not contiguous thereto for mining or milling purposes, not exceeding the quantity allowed for such purpose by section 2337, or prior laws, under which the land was appropriated, the proprietors of such vein or lode may file in the proper land office their application for a patent, under oath, in manner already set forth herein, which application, together with the plat and field notes, may include, embrace, and describe, in addition to the vein or lode claim, such non-contiguous mill site, and after due proceedings as to notice, etc., a patent will be issued conveying the same as one claim. The owner of a patented lode may, by an independent application, secure a mill site if good faith is manifested in its use or occupation in connection with the lode and no adverse claim exists.

63. Where the original survey includes a lode claim and also a mill site the lode claim should be described in the plat and field notes as "Sur. No. 37, A," and the mill site as "Sur. No. 37, B," or whatever may be its appropriate numerical designation; the course and distance from a corner of the mill site

to a corner of the lode claim to be invariably given in such plat and field notes, and a copy of the plat and notice of application for patent must be conspicuously posted upon the mill site as well as upon the vein or lode claim for the statutory period of sixty days. In making the entry no separate receipt or certificate need be issued for the mill site, but the whole area of both lode and mill site will be embraced in one entry, the price being five dollars for each acre and fractional part of an acre embraced by such lode and mill-site claim.

64. In case the owner of a quartz mill or reduction works is not the owner or claimant of a vein or lode claim the law permits him to make application therefor in the same manner as prescribed herein for mining claims, and after due notice and proceedings, in the absence of a valid adverse filing, to enter and receive a patent for his mill site at said price per acre.

65. In every case there must be satisfactory proof that the land claimed as a mill site is not mineral in character, which proof may, where the matter is unquestioned, consist of the sworn statement of two or more persons capable, from acquaintance with the land, to testify understandingly.

CITIZENSHIP.

66. The proof necessary to establish the citizenship of applicants for mining patents must be made in the following manner: In case of an incorporated company, a certified copy of their character or certificate of incorporation must be filed. In case of an association of persons unincorporated, the affidavit of their duly authorized agent, made upon his knowledge or upon information and belief, setting forth the residence of each person forming such association, must be submitted. This affidavit must be accompanied by a power of attorney from the parties forming such association, authorizing the person who makes the affidavit of citizenship to act for them in the matter of application for patent.

67. In case of an individual or an association of individuals who do not appear by their duly authorized agent, the affidavit of each applicant, showing whether he is a native or a nat-

uralized citizen, when and where born, and his residence, will be required.

68. In case an applicant has declared his intention to become a citizen or has been naturalized, his affidavit must show the date, place, and the court before which he declared his intention, or from which his certificate of citizenship issued, and present residence.

69. The affidavit of the claimant as to his citizenship may be taken before the register or receiver, or any other officer authorized to administer oaths within the land districts; or, if the claimant is residing beyond the limits of the district, the affidavit may be taken before the clerk of any court of record or before any notary public of any State or Territory.

70. If citizenship is established by the testimony of disinterested persons, such testimony may be taken at any place before any person authorized to administer oaths, and whose official character is duly verified.

71. No entry will be allowed until the register has satisfied himself, by careful examination, that proper proofs have been filed upon the points indicated in the law and official regulations. Transfers made subsequent to the filing of the application for patent will not be considered, but entry will be allowed and patent issued in all cases in the name of the applicant for patent, the title conveyed by the patent, of course, in each instance inuring to the transferee of such applicant where a transfer has been made pending the application for patent.

72. The mineral entries will be given the current serial numbers according to the provisions of the circular of June 10, 1908, whether the same are of lode or of placer claims or of mill sites.

73. In sending up the papers in a case the register must not omit certifying to the fact that the notice was posted in his office for the full period of sixty days, such certificate to state distinctly when such posting was done and how long continued. The schedule of papers, form 4—252f, should accompany the returns with all mineral applications and entries allowed.

POSSESSORY RIGHT.

74. The provisions of section 2332, Revised Statutes, will

greatly lessen the burden of proof, more especially in the case of old claims located many years since, the records of which, in many cases, have been destroyed by fire, or lost in other ways during the lapse of time, but concerning the possessory right to which all controversy or litigation has long been settled.

75. When an applicant desires to make his proof of possessory right in accordance with this provision of law, he will not be required to produce evidence of location, copies of conveyances, or abstracts of title, as in other cases, but will be required to furnish a duly certified copy of the statute of limitation of mining claims for the State or Territory, together with his sworn statement giving a clear and succinct narration of the facts as to the origin of his title, and likewise as to the continuation of his possession of the mining ground covered by his application; the area thereof; the nature and extent of the mining that has been done thereon; whether there has been any opposition to his possession, or litigation with regard to his claim, and if so, when the same ceased; whether such cessation was caused by compromise or by judicial decree, and any additional facts within the claimant's knowledge having a direct bearing upon his possession and bona fides which he may desire to submit in support of his claim.

76. There should likewise be filed a certificate, under seal of the court having jurisdiction of mining cases within the judicial district embracing the claim, that no suit or action of any character whatever involving the right of possession to any portion of the claim applied for is pending, and that there has been no litigation before said court affecting the title to said claim or any part thereof for a period equal to the time fixed by the statute of limitations for mining claims in the State or Territory as aforesaid other than that which has been finally decided in favor of the claimant.

77. The claimant should support his narrative of facts relative to his possession, occupancy, and improvements by corroborative testimony of any disinterested person or persons of credibility who may be cognizant of the facts in the case and are capable of testifying understandingly in the premises.

ADVERSE CLAIMS.

78. An adverse claim must be filed with the register and receiver of the land office where the application for patent is filed or with the register and receiver of the district in which the land is situated at the time of filing the adverse claim. It must be on the oath of the adverse claimant, or it may be verified by the oath of any duly authorized agent or attorney in fact of the adverse claimant cognizant of the facts stated.

79. Where an agent or attorney in fact verifies the adverse claim, he must distinctly swear that he is such agent or attorney, and accompany his affidavit by proof thereof.

80. The agent or attorney in fact must make the affidavit where the claim is situated.

81. The adverse claim so filed must fully set forth the nature and extent of the interference or conflict; whether the adverse party claims as a purchaser for valuable consideration or as a locator. If the former, a certified copy of the original location, the original conveyance, a duly certified copy thereof, or an abstract of title from the office of the proper recorder should be furnished, or if the transaction was a merely verbal one he will narrate the circumstances attending the purchase, the date thereof, and the amount paid, which facts should be supported by the affidavit of one or more witnesses, if any were present at the time, and if he claims as a locator he must file a duly certified copy of the location from the office of the proper recorder.

82. In order that the "boundaries" and "extent" of the claim may be shown, it will be incumbent upon the adverse claimant to file a plat showing his entire claim, its relative situation or position with the one against which he claims, and the extent of the conflict: *Provided, however,* That if the application for patent describes the claim by legal subdivisions, the adverse claimant, if also claiming by legal subdivisions, may describe his adverse claim in the same manner without further survey or plat. If the claim is not described by legal subdivisions, it will generally be more satisfactory if the plat thereof is made from

an actual survey by a mineral surveyor, and its correctness officially certified by him.

83. Upon the foregoing being filed within the sixty days' period of publication, the register, or in his absence the receiver, will immediately give notice in writing to *the parties* that such adverse claim has been filed, informing them that the party who filed the adverse claim will be required within thirty days from the date of such filing to commence proceedings in a court of competent jurisdiction to determine the question of right of possession, and to prosecute the same with reasonable diligence to final judgment, and that, should such adverse claimant fail to do so, his adverse claim will be considered waived and the application for patent be allowed to proceed upon its merits.

84. When an adverse claim is filed as aforesaid, the register or receiver will indorse upon the same the precise date of filing, and preserve a record of the date of notifications issued thereon; and thereafter all proceedings on the application for patent will be stayed with the exception of the completion of the publication and posting of notices and plat and the filing of the necessary proof thereof, until the controversy shall have been finally adjudicated in court or the adverse claim waived or withdrawn.

85. Where an adverse claim has been filed and suit thereon commenced within the statutory period and final judgment rendered determining the right of possession, it will not be sufficient to file with the register a certificate of the clerk of the court setting forth the facts as to such judgment, but the successful party must, before he is allowed to make entry, file a certified copy of the judgment roll, together with the other evidence required by section 2326, Revised Statutes.

86. Where such suit has been dismissed, a certificate of the clerk of the court to that effect or a certified copy of the order of dismissal will be sufficient.

87. After an adverse claim has been filed and suit commenced, a relinquishment or other evidence of abandonment of the adverse claim will not be accepted, but the case must be terminated and proof thereof furnished as required by the last two paragraphs.

88. Where an adverse claim has been filed, but no suit com-

menced against the applicant for patent within the statutory period, a certificate to that effect by the clerk of the State court having jurisdiction in the case, and also by the clerk of the circuit court of the United States for the district in which the claim is situated, will be required.

APPOINTMENT OF SURVEYORS FOR SURVEY OF MINING CLAIMS AND CHARGES.

89. Section 2334 provides for the appointment of surveys to survey mining claims, and authorizes the Commissioner of the General Land Office to establish the rates to be charged for surveys and for newspaper publications. Under this authority of law the following rates have been established as the maximum charges for newspaper publications in mining cases:

(1) Where a daily newspaper is designated the charge shall not exceed seven dollars for each ten lines of space occupied, and where a weekly newspaper is designated as the medium of publication five dollars for the same space will be allowed. Such charge shall be accepted as full payment for publication in each issue of the newspaper for the entire period required by law.

It is expected that these notices shall not be so abbreviated as to curtail the description essential to a perfect notice, and the said rates established upon the understanding that they are to be in the usual body type used for advertisements.

(2) For the publication of citations in contests or hearings involving the character of lands the charges shall not exceed eight dollars for five publications in weekly newspapers or ten dollars for publications in daily newspapers for thirty days.

90. The surveyors-general of the several districts will, in pursuance of said law, appoint in each land district as many competent surveyors for the survey of mining claims as may seek such appointment, it being distinctly understood that all expenses of these notices and surveys are to be borne by the mining claimant and not by the United States. The statute provides that the claimant shall also be at liberty to employ any United States mineral surveyor to make the survey. Each surveyor appointed to survey mining claims before entering upon the duties of his office or appointment shall be required to

enter into a bond of not less than \$5000 for the faithful performance of his duties.

91. With regard to the platting of the claim and other office work in the surveyor-general's office, that officer will make an estimate of the cost thereof, which amount the claimant will deposit with any assistant United States treasurer or designated depository in favor of the United States Treasurer, to be paid to the credit of the fund created by "individual depositors for surveys of the public lands," and file with the surveyor-general duplicate certificates of such deposit in the usual manner.

92. The surveyor-general will endeavor to appoint surveyors to survey mining claims so that one or more may be located in each mining district for the greater convenience of miners.

93. The usual oaths will be required of these surveyors and their assistants as to the correctness of each survey executed by them.

The duty of the surveyor ceases when he has executed the survey and returned the field notes and preliminary plat thereof with his report to the surveyor-general. He will not be allowed to prepare for the mining claimant the papers in support of an application for patent, or otherwise perform the duties of an attorney before the land office in connection with a mining claim.

The surveyors-general and local land officers are expected to report any infringement of this regulation to this office.

94. Should it appear that excessive or exorbitant charges have been made by any surveyor or any publisher, prompt action will be taken with the view of correcting the abuse.

FEES OF REGISTERS AND RECEIVERS.

95. The fees payable to the register and receiver for filing and acting upon applications for mineral-land patents are five dollars to each officer, to be paid by the applicant for patent at the time of filing, and the like sum of five dollars is payable to each officer by an adverse claimant at the time of filing his adverse claim. (Sec. 2238, R. S., par. 9.)

[Paragraphs 96, 97, and 98 are superseded by the general circular instructions of June 10, 1908.]

HEARINGS TO DETERMINE CHARACTER OF LANDS.

99. The Rules of Practice in cases before the United States district land offices, the General Land Office, and the Department of the Interior will, so far as practicable, govern in all cases and proceedings arising in contests and hearings to determine the character of lands.

100. Public land returned by the surveyor-general as mineral shall be withheld from entry as agricultural land until the presumption arising from such a return shall be overcome by testimony taken in the manner hereinafter described.

101. Hearings to determine the character of lands:

(1) Lands returned as mineral by the surveyor-general.

When such lands are sought to be entered as agricultural under laws which require the submission of final proof after due notice by publication and posting, the filing of the proper nonmineral affidavit in the absence of allegations that the land is mineral will be deemed sufficient as a preliminary requirement. A satisfactory showing as to character of land must be made when final proof is submitted.

In case of application to enter, locate, or select such lands as agricultural, under laws in which the submission of final proof after due publication and posting is *not* required, notice thereof must first be given by publication for sixty days and posting in the local office during the same period, and affirmative proof as to the character of the land submitted. In the absence of allegations that the land is mineral, and upon compliance with this requirement, the entry, location, or selection will be allowed, if otherwise regular.

(2) Lands returned as agricultural and alleged to be mineral in character.

Where as against the claimed right to enter such lands as agricultural it is alleged that the same are mineral, or are applied for as mineral lands, the proceedings in this class of cases will be in the nature of a contest, and the practice will be governed by the rules in force in contest cases.

[Paragraphs 102 to 104, inclusive, are superseded by appro-

priate instructions relative to nonmineral proofs in railroad, State, and forest lieu selections contained in separate circulars.]

105. At hearings to determine the character of lands the claimants and witnesses will be thoroughly examined with regard to the character of the land; whether the same has been thoroughly prospected; whether or not there exists within the tract or tracts claimed any lode or vein of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, or copper, or other valuable deposit which has ever been claimed, located, recorded, or worked; whether such work is entirely abandoned, or whether occasionally resumed; if such lode does exist, by whom claimed, under what designation, and in which subdivision of the land it lies; whether any placer mine or mines exist upon the land; if so, what is the character thereof—Whether of the shallow-surface description, or of the deep cement, blue lead, or gravel deposits; to what extent mining is carried on when water can be obtained, and what the facilities are for obtaining water for mining purposes; upon what particular ten-acre subdivisions mining has been done, and at what time the land was abandoned for mining purposes, if abandoned at all. In every case, where practicable, an adequate quantity or number of representative samples of the alleged mineral-bearing matter or material should be offered in evidence, with proper identification, to be considered in connection with the record, with which they will be transmitted upon each appeal that may be taken. Testimony may be submitted as to the geological formation and development of mineral on adjoining or adjacent lands and their relevancy.

106. The testimony should also show the agricultural capacities of the land, what kind of crops are raised thereon, and the value thereof; the number of acres actually cultivated for crops of cereals or vegetables, and within which particular ten-acre subdivision such crops are raised; also which of these subdivisions embrace the improvements, giving in detail the extent and value of the improvements, such as house, barn, vineyard, orchard, fencing, etc., and mining improvements.

107. The testimony should be as full and complete as possible; and in addition to the leading points indicated above,

where an attempt is made to prove the mineral character of lands which have been entered under the agricultural laws, it should show at what date, if at all, valuable deposits of minerals were first known to exist on the lands.

108. When the case comes before this office, such decision will be made as the law and the facts justify. In cases where a survey is necessary to set apart the mineral from the agricultural land, the proper party, *at his own expense*, will be required to have the work done by a reliable and competent surveyor to be designated by the surveyor-general. Application therefor must be made to the register and receiver, accompanied by description of the land to be segregated and the evidence of service upon the opposite party of notice of his intention to have such segregation made. The register and receiver will forward the same to this office, when the necessary instructions for the survey will be given. The survey in such case, where the claims to be segregated are vein or lode claims, must be executed in such manner as will conform to the requirements in section 2320, Revised Statutes, as to length and width and parallel end lines.

109. Such survey when executed must be properly sworn to by the surveyor, either before a notary public, United States commissioner, officer of a court of record, or before the register or receiver, the deponent's character and credibility to be properly certified to by the officer administering the oath.

110. Upon the filing of the plat and field notes of such survey with the register and receiver, duly sworn to as aforesaid, they will transmit the same to the surveyor-general for his verification and approval, who, if he finds the work correctly performed, will furnish authenticated copies of such plat and description both to the proper local land office and to this office, made upon the usual drawing-paper township blank.

The copy of plat furnished the local office and this office must be a diagram verified by the surveyor-general, showing the claim or claims segregated, and designating the separate fractional agricultural tracts in each 40-acre legal subdivision by the proper lot number, beginning with No. 1 in each section, and giving

the area in each lot, the same as provided in paragraph 37 in the survey of mining claims on surveyed lands.

111. The fact that a certain tract of land is decided upon testimony to be mineral in character is by no means equivalent to an award of the land to a miner. In order to secure a patent for such land, he must proceed as in other cases, in accordance with the foregoing regulations.

Blank forms for proofs in mineral cases are not furnished by the General Land Office.

DISTRICT OF ALASKA.

112. Section 13, act of May 14, 1898, according to native-born citizens of Canada "the same mining rights and privileges" in the district of Alaska as are accorded to citizens of the United States in British Columbia and the Northwest Territory by the laws of the Dominion of Canada, is not now and never has been operative, for the reason that the only mining rights and privileges granted to any person by the laws of the Dominion of Canada are those of leasing mineral lands upon the payment of a stated royalty, and the mining laws of the United States make no provision for such leases.

113. For the sections of the act of June 6, 1900, making further provision for a civil government for Alaska, which provide for the establishment of recording districts and the recording of mining locations; for the making of rules and regulations by the miners and for the legalization of mining records; for the extension of the mining laws to the district of Alaska, and for the exploration and mining of tide lands and lands below low tide; and relating to the rights of Indians and persons conducting schools and missions, see pp. 212-213 of this circular.

MINERAL LANDS WITHIN NATIONAL FORESTS.

114. The act of June 4, 1897, provides that "any mineral lands in any forest reservation which have been or which may be shown to be such, and subject to entry under the existing mining laws of the United States and the rules and regulations applying thereto, shall continue to be subject to such location and entry," notwithstanding the reservation. This makes min-

eral lands in the forest reserves subject to location and entry under the general mining laws in the usual manner.

The act also provides that "The Secretary of the Interior may permit, under regulations to be prescribed by him, the use of timber and stone found upon such reservations, free of charge, by *bona fide* settlers, miners, residents, and prospectors for minerals, for firewood, fencing, buildings, mining, prospecting, and other domestic purposes, as may be needed by such persons for such purposes; such timber to be used within the State or Territory, respectively, where such reservations may be located."

TRANSFER OF NATIONAL FORESTS.

Act of February 1, 1905 (33 Stat., 628).

The Secretary of the Department of Agriculture shall, from and after the passage of this act, execute or cause to be executed all laws affecting public lands heretofore or hereafter reserved under the provisions of section twenty-four of the act entitled "An act to repeal the timber-culture laws, and for other purposes," approved March 3, 1891, and acts supplemental to and amendatory thereof, after such lands have been so reserved, excepting such laws as affect the surveying, prospecting, locating, appropriating, entering, relinquishing, reconveying, certifying, or patenting of any of such lands.

(For further information see Use Book—Forest Service.)

SURVEYS OF MINING CLAIMS.

GENERAL PROVISIONS.

115. Under section 2334, Revised Statutes, the U. S. surveyor-general "may appoint in each land district containing mineral land as many competent surveyors as shall apply for appointment to survey mining claims."

116. Persons desiring such appointment should therefore file their applications with the surveyor-general for the district wherein appointment is asked, who will furnish all information necessary.

117. All appointments of mineral surveyors must be submitted to the Commissioner of the General Land Office for approval.

118. The surveyors-general have authority to suspend or revoke the commissions of mineral surveyors for cause. Before final action, however, the matter should be submitted to the Commissioner of the General Land Office for approval.

119. Such surveyors will be allowed the right of appeal from the action of the surveyor-general in the usual manner. Such appeal should be filed with the surveyor-general, who will at once transmit the same, with a full report, to the General Land Office.

120. Neither the surveyor-general nor the Commissioner of the General Land Office has jurisdiction to settle differences, relative to the payment of charges for field work, between mineral surveyors and claimants. These are matters of private contract and must be enforced in the ordinary manner, *i. e.*, in the local courts. The Department has, however, authority to investigate charges affecting the official actions of mineral surveyors, and will, on sufficient cause shown, suspend or revoke their appointment.

121. The surveyors-general should appoint as many competent mineral surveyors as apply for appointment, in order that claimants may have a choice of surveyors, and be enabled to have their work done on the most advantageous terms.

122. The schedule of charges for office work should be as low as is possible. No additional charges should be made for orders for amended surveys, unless the necessity therefor is clearly the fault of the claimant, or considerable additional office work results therefrom.

123. [Omitted.]

124. Mineral surveyors will address all official communications to the surveyor-general. They will, when a mining claim is the subject of correspondence, give the name and survey number. In replying to letters they will give the subject-matter and date of the letter. They will promptly notify the surveyor-general of any change in post-office address.

125. Mineral surveyors should keep a complete record of each survey made by them and the facts coming to their knowledge at the time, as well as copies of all their field notes, reports, and official correspondence, in order that such evidence may

be readily produced when called for at any future time. Field notes and other reports must be written in a clear and legible hand or typewritten, in noncopying ink, and upon the proper blanks furnished gratuitously by the surveyor-general's office upon application therefor. No interlineations or erasures will be allowed.

126. No return by a mineral surveyor will be recognized as official unless it is over his signature as a United States mineral surveyor, and made in pursuance of a special order from the surveyor-general's office. After he has received an order for survey he is required to make the survey and return correct field notes thereof to the surveyor-general's office without delay.

127. The claimant is required, in all cases, to make satisfactory arrangements with the surveyor for the payment for his services and those of his assistants in making the survey, as the United States will not be held responsible for the same.

128. A mineral surveyor is precluded from acting, either directly or indirectly, as attorney in mineral claims. His duty in any particular case ceases when he has executed the survey and returned the field notes and preliminary plat, with his report, to the surveyor-general. He will not be allowed to prepare for the mining claimant the papers in support of his application for patent, or otherwise perform the duties of an attorney before the land office in connection with a mining claim. He is not permitted to combine the duties of surveyor and notary public in the same case by administering oaths to the parties in interest. It is preferable that both preliminary and final oaths of assistants should be taken before some officer duly authorized to administer oaths, other than the mineral surveyor. In cases, however, where great delay, expense, or inconvenience would result from a strict compliance with this rule, the mineral surveyor is authorized to administer the necessary oaths to his assistants, but in each case where this is done, he will submit to the proper surveyor-general a full written report of the circumstances which required his stated action; otherwise he must have absolutely nothing to do with the case, except in his official capacity as surveyor. He will not employ chainmen interested therein in any manner.

METHODS OF SURVEY.

129. The survey made and returned must, in every case, be an actual survey on the ground in full detail, made by the mineral surveyor in person after the receipt of the order, and without reference to any knowledge he may have previously acquired by reason of having made the location survey or otherwise, and must show the actual facts existing at the time. This precludes him from calculating the connections to corners of the public survey and location monuments, or any other lines of his survey through prior surveys made by others and substituting the same for connections or lines of the survey returned by him. The term *survey* in this paragraph applies not only to the usual field work, but also to the examinations required for the preparation of affidavits of five hundred dollars expenditure, descriptive reports on placer claims, and all other reports.

130. The survey of a mining claim may consist of several contiguous locations, but such survey must, in conformity with statutory requirements, distinguish the several locations, and exhibit the boundaries of each. The survey will be given but one number.

131. The survey must be made in strict conformity with, or be embraced within, the lines of the location upon which the order is based. If the survey and location are identical, that fact must be clearly and distinctly stated in the field notes. If not identical, a bearing and distance must be given from each established corner of survey to the corresponding corner of the location, and the location corner must be fully described, so that it can be identified. The lines of the location, as found upon the ground, must be laid down upon the preliminary plat in such a manner as to contrast and show their relations to the lines of survey.

132. In view of the principle that courses and distances must give way when in conflict with fixed objects and monuments, the surveyor will not, under any circumstances, change the corners of the location for the purpose of making them conform to the description in the record. If the difference from the location be slight, it may be explained in the field notes.

133. No mining claim located subsequent to May 10, 1872, should exceed the statutory limit in width on each side of the center of vein or 1,500 feet in length, and all surveys must close within 50-100 feet in 1,000 feet, and the error must not be such as to make the location exceed the statutory limit, and in absence of other proof the discovery point is held to be the center of the vein on the surface. The course and length of the vein should be marked upon the plat.

134. All mineral surveys must be made with a transit, with or without solar attachment, by which the meridian can be determined independently of the magnetic needle, and all courses must be referred to the true meridian. The variation should be noted at each corner of the survey. The true course of at least one line of each survey must be ascertained by astronomical observations made at the time of the survey; the data for determining the same and details as to how these data were arrived at must be given. Or, in lieu of the foregoing, the survey must be connected with some line the true course of which has been previously established beyond question, and in a similar manner, and, when such lines exist, it is desirable in all cases that they should be used as a proof of the accuracy of subsequent work.

135. Corner No. 1 of each location embraced in a survey must be connected by course and distance with nearest corner of the public survey or with a United States location monument, if the claim lies within two miles of such corner or monument. If both are within the required distance, the connection must be with the corner of the public survey.

136. Surveys and connections of mineral claims may be made in suspended townships in the same manner as though the claims were upon unsurveyed land, except as hereinafter specified, by connecting them with independent mineral monuments. At the same time, the position of any public-land corner which may be found in the neighborhood of the claim should be noted, so that, in case of the release of the township from suspension, the position of the claim can be shown on the plat.

137. A mineral survey must not be returned with its connection made only with a corner of the public survey, where

the survey of the township within which it is situated is under suspension, nor connected with a mineral monument alone, when situated within the limits of a township the regularity and correctness of the survey of which is unquestioned.

138. In making an official survey, corner No. 1 of each location must be established at the corner nearest the corner of the public survey or location monument, unless good cause is shown for its being placed otherwise. If connections are given to both a corner of the public survey and location monument, corners Nos. 1 should be placed at the corner nearest the corner of the public survey. When a boundary line of a claim intersects a section line, courses and distances from point of intersection to the Government corners at each end of the half mile of section line so intersected must be given.

139. In case a survey is situated in a district where there are no corners of the public survey and no monuments within the prescribed limits, a mineral monument must be established, in the location of which the greatest care must be exercised to insure permanency as to site and construction.

140. The site, when practicable, should be some prominent point, visible for a long distance from every direction, and should be so chosen that the permanency of the monument will not be endangered by snow, rock, or landslides, or other natural causes.

141. The monument should consist of a stone not less than 30 inches long, 20 inches wide, and 6 inches thick, set halfway in the ground, with a conical mound of stone 4 feet high and 6 feet base alongside. The letters U. S. L. M., followed by the consecutive number of the monument in the district, must be plainly chiseled upon the stone. If impracticable to obtain a stone of required dimensions, then a post 8 feet long, 6 inches square, set 3 feet in the ground, scribed as for a stone monument, protected by a well-built conical mound of stone of not less than 3 feet high and 6 feet base around it, may be used. The exact point for connection must be indicated on the monument by an X chiseled thereon; if a post is used, then a tack must be driven into the post to indicate the point.

142. From the monument, connections by course and dis-

tance must be taken to two or three bearing trees or rocks, and to any well-known and permanent objects in the vicinity, such as the confluence of streams, prominent rocks, buildings, shafts, or mouths of adits. Bearing trees must be properly scribed B. T. and bearing rocks chiseled B. R., together with the number of the location monument; the exact point on the tree or stone to which the connection is taken should be indicated by a cross or other unmistakable mark. Bearings should also be taken to prominent mountain peaks, and the approximate distance and direction ascertained from the nearest town or mining camp. A detailed description of the locating monument, with a topographical map of its location, should be furnished the office of the surveyor-general by the surveyor.

143. Corners may consist of—

First.—A stone at least 24 inches long set 12 inches in the ground, with a conical mound of stone $1\frac{1}{2}$ feet high, 2 feet base, alongside.

Second.—A post at least 3 feet long by 4 inches square, set 18 inches in the ground and surrounded by a substantial mound of stone or earth.

Third.—A rock in place.

A stone should always be used for a corner when possible, and when so used the kind should be stated.

144. All corners must be established in a permanent and workmanlike manner, and the corner and survey number must be neatly chiseled or scribed on the sides facing the claim. The *exact* corner point must be permanently indicated on the corner. When a rock in place is used, its dimensions above ground must be stated and a cross chiseled at the exact corner point.

145. In case the point for the corner be inaccessible or unsuitable a witness corner, which must be marked with the letters W. C. in addition to the corner and survey number, should be established. The witness corner should be located upon a line of the survey and as near as possible to the true corner, with which it must be connected by course and distance. The reason why it is impossible or impracticable to establish the true corner must always be stated in the field notes, and in

running the next course it should be stated whether the start is made from the true place for corner or from witness corner.

146. The identity of all corners should be perpetuated by taking courses and distances to bearing trees, rocks, and other objects, as prescribed in the establishment of location monuments, and when no bearings are given it should be stated that no bearings are available. Permanent objects should be selected for bearings whenever possible.

147. If an official mineral survey has been made in the vicinity, within a reasonable distance, a further connecting line should be run to some corner thereof; and in like manner all conflicting surveys and locations should be so connected, and the corner with which connection is made in each case described. Such connections will be made and conflicts shown according to the boundaries of the neighboring or conflicting claims as each is marked, defined, and actually established upon the ground. The mineral surveyor will fully and specifically state in his return *how* and by what *visible evidences* he was able to identify on the ground the several conflicting surveys and those which appear according to their returned tie or boundary lines to conflict, if they were so identified, and report errors or discrepancies found by him in any such surveys. In the survey of contiguous claims which constitute a consolidated group, where corners are common, bearings should be mentioned but once.

148. The mineral surveyor should note carefully all topographical features of the claim, taking distances on his lines to intersections with all streams, gulches, ditches, ravines, mountain ridges, roads, trails, etc., with their widths, courses, and other data that may be required to map them correctly. All municipal or private improvements, such as blocks, streets, and buildings, should be located.

149. If, in running the exterior lines of a claim, the survey is found to conflict with the survey of another claim, the distances to the points of intersection, and the courses and distances along the line intersected from an established corner of such conflicting claim to such point of intersection, should be described in the field notes: *Provided*, That where a corner of

the conflicting survey falls within the claim being surveyed, such corner should be selected from which to give the bearing, otherwise the corner nearest the intersection should be taken. The same rule should govern in the survey of claims embracing two or more locations the lines of which intersect.

150. A lode and mill-site claim in one survey will be distinguished by the letters A and B following the number of the survey. The corners of the mill site will be numbered independently of those of the lode. Corner No. 1 of the mill site must be connected with a corner of the lode claim as well as with a corner of the public survey or United States location monument.

151. When a placer claim includes lodes, or when several contiguous placer or lode locations are included as one claim in one survey, there must be given to the corners of each location constituting the same a separate consecutive numerical designation, beginning with corner No. 1 in each case.

152. Throughout the description of the survey, after each reference to the lines or corners of a location, the name thereof must be given, and if unsurveyed, the fact stated. If reference is made to a location included in a prior official survey, the survey number must be given, followed by the name of the location. Corners should be described once only.

153. The total area of each location and also the area in conflict with each intersection survey or claim should be stated. But when locations embraced in one survey conflict with each other such conflicts should only be stated in connection with the location from which the conflicting area is excluded.

154. It should be stated particularly whether the claim is upon surveyed or unsurveyed public lands, giving in the former case the quarter section, township, and range in which it is located, and the section lines should be indicated by full lines and the quarter-section lines by dotted lines.

155. The title-page of the field notes must contain the post-office address of the claimant or his authorized agent.

156. In the mineral surveyor's report of the value of the improvements all *actual* expenditures and *mining* improvements made by the claimant or his grantors, having a direct relation to

the development of the claim, must be included in the estimate.

157. The expenditures required may be made from the surface or in running a tunnel, drifts, or cross-cuts for the development of the claim. Improvements of any other character, such as buildings, machinery, or roadways, must be excluded from the estimate, unless it is shown clearly that they are associated with actual excavations, such as cuts, tunnels, shafts, etc., are essential to the practical development of and actually facilitate the extraction of mineral from the claim.

158. All mining and other improvements claimed will be located by courses and distances from corners of the survey, or from points on the center or side lines, specifying with particularity and detail the dimensions and character of each, and the improvements upon each location should be numbered consecutively, the point of discovery being always No. 1. Improvements made by a former locator who has abandoned his claim can not be included in the estimate, but should be described and located in the notes and plat.

159. In case of a lode and mill-site claim in the same survey the expenditure of five hundred dollars must be shown upon the lode claim.

160. If the value of the labor and improvements upon a mineral claim is less than five hundred dollars at the time of survey, the mineral surveyor may file with the surveyor-general supplemental proof showing five hundred dollars expenditure made prior to the expiration of the period of publication.

161. The mineral surveyor will return with his field notes a preliminary plat on blank sent to him for that purpose, protracted on a scale of two hundred feet to an inch, if practicable. In preparing plats the top is north. Copy of the calculations of areas by double meridian distances and of all triangulations or traverse lines must be furnished. The lines of the claim surveyed should be heavier than the lines of conflicting claims.

162. Whenever a survey has been reported in error the surveyor who made it will be required to promptly make a thorough examination upon the premises and report the result, under oath, to the surveyor-general's office. In case he finds his survey

in error he will report in detail all discrepancies with the original survey and submit any explanation he may have to offer as to the cause. If, on the contrary, he should report his survey correct, a joint survey will be ordered to settle the differences with the surveyor who reported the error. A joint survey must be made within ten days after the date of order unless satisfactory reasons are submitted, under oath, for a postponement. The field work must in every sense of the term be a *joint* and not a separate survey, and the observations and measurements taken with the same instrument and chain, previously tested and agreed upon.

163. The mineral surveyor found in error, or, if both are in error, the one who reported the same, will make out the field notes of the joint survey, which, after being duly signed and sworn to by both parties, must be transmitted to the surveyor-general's office.

164. Inasmuch as amended surveys are ordered only by special instructions from the General Land Office, and the conditions and circumstances peculiar to each separate case and the objects sought by the required amendment, alone govern all special matters relative to the manner of making such survey and the form and subject-matter to be embraced in the field notes thereof, but few general rules applicable to all cases can be laid down.

165. The amended survey must be made in strict conformity with, or be embraced within, the lines of the original survey. If the amended and original surveys are identical, that fact must be clearly and distinctly stated in the field notes. If not identical, a bearing and distance must be given from each established corner of the amended survey to the corresponding corner of the original survey. The lines of the original survey, as found upon the ground, must be laid down upon the preliminary plat in such manner as to contrast and show their relation to the lines of the amended survey.

166. The field notes of the amended survey must be prepared on the same size and form of blanks as are the field notes of the original survey, and the word "amended" must be used before the word "survey" wherever it occurs in the field notes.

167. Mineral surveyors are required to make full examinations of all placer claims at the time of survey and file with the field notes a descriptive report, in which will be described—

(a) The quality and composition of the soil, and the kind and amount of timber and other vegetation.

(b) The *locus* and size of streams, and such other matters as may appear upon the surface of the claims.

(c) The character and extent of all surface and underground workings, whether placer or lode, for mining purposes, locating and describing them.

(d) The proximity of centers of trade or residence.

(e) The proximity of well-known systems of lode deposits or of individual lodes.

(f) The use or adaptability of the claim for placer mining, and whether water has been brought upon it in sufficient quantity to mine the same, or whether it can be procured for that purpose.

(g) What works or expenditures have been made by the claimant or his grantors for the development of the claim, and their situation and location with respect to the same as applied for.

(h) The true situation of all mines, salt licks, salt springs, and mill sites which come to the surveyor's knowledge, or a report by him that none exist on the claim, as the facts may warrant.

(i) Said report must be made under oath and duly corroborated by one or more disinterested persons.

168. The employing of claimants, their attorneys, or parties in interest, as assistants in making surveys of mineral claims will not be allowed.

169. The field work must be accurately and properly performed and returns made in conformity with the foregoing instructions. Errors in the survey must be corrected at the surveyor's own expense, and if the time required in the examination of the returns is increased by reason of neglect or carelessness, he will be required to make an additional deposit for office work. He will be held to a strict accountability for the faithful discharge of his duties, and will be required to observe fully the requirements and regulations in force as to making mineral surveys. If found incompetent as a surveyor, careless in the discharge of

his duties, or guilty of a violation of said regulations, his appointment will be promptly revoked.

Approved March 29, 1909.

R. A. BALLINGER,
Secretary.

S. V. PROUDFIT,
Acting Commissioner.

No additional regulations have been issued or changes made to March 4, 1911.

APPENDIX C

OFFICES OF SURVEYORS-GENERAL

Alaska	Juneau
Arizona	Tucson
California	San Francisco
Colorado	Denver
Idaho	Boise City
Montana	Helena
Nevada	Reno
New Mexico.....	Santa Fe
Oregon	Portland
South Dakota	huron
Utah	Salt Lake City
Washington	Olympia
Wyoming	Cheyenne

Manual of Instructions for the Survey of the Mineral Lands of the United States

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,

Washington, D. C., September 11, 1908.

TO UNITED STATES MINERAL SURVEYORS.

SIRS: These regulations are chiefly compiled from the practice of the various surveying districts, no changes or additions being made, except where necessary to secure uniformity and to conform to present interpretations of the law.

You are expected to strictly comply with these instructions, and no survey will be accepted or approved by the surveyor-general until all the requirements herein have been fully met.

Very respectfully,

FRED DENNETT,
Commissioner.

Approved, October 6, 1908.

FRANK PIERCE,
First Assistant Secretary.

GENERAL INFORMATION

APPOINTMENTS

1. Under section 2334, United States Revised Statutes, the United States surveyor-general "may appoint in each land district containing mineral lands as many competent surveyors as shall apply for appointment to survey mining claims."

2. Capable persons desiring such appointments should there-

fore file their applications with the surveyor-general for the district wherein appointment is asked, who will furnish all information necessary.

3. Mineral surveyors may, at the same time, be appointed in more than one State or land district. (20 L. D., 163.)

4. The surveyors-general have authority to suspend or revoke the appointments of mineral surveyors for cause. The surveyors, however, will be allowed the right of appeal from the action of the surveyor-general in the usual manner. The appeal must be filed with the surveyor-general, who will at once transmit the same, with a full report, to the General Land Office. (20 L. D., 283.)

5. Neither the surveyor-general nor the Commissioner of the General Land Office has jurisdiction to settle differences, relative to the payment of charges for field work, between mineral surveyors and claimants. These are matters of private contract and must be enforced in the ordinary manner, i. e., in the local courts. The department has, however, authority to investigate charges affecting the official actions of mineral surveyors, including combinations to fix prices for survey work, and will, on sufficient cause shown, suspend or revoke the appointment of the surveyor.

6. Where error in the original survey appears to be the fault of the mineral surveyor who made the survey, he should be required to make the necessary corrections in the field as speedily as practicable; and upon his failure or refusal, without satisfactory reason, to comply with instructions within a specified time, he should be called upon to show why his appointment should not be suspended or revoked for willful neglect or incompetency. In the event he fails or refuses to comply with the instructions, the mineral claimant will be notified and given a reasonable time to apply for an amended survey.

7. These instructions are subject to the limitations of section 2324, United States Revised Statutes, so far as the same refers to local laws and customs.

8. The Commissioner of the General Land office is ex-officio United States surveyor-general for Arkansas and Florida, and all surveys in Oklahoma are made under his direction as Commissioner.

BONDS

9. All bonds of mineral surveyors must be submitted to the Commissioner of the General Land Office for approval.

10. The appointment of a mineral surveyor is not for any fixed period, the continuation thereof depending upon the character of the service rendered. The surveyor-general will, therefore, not appoint mineral surveyors for a specified term. While under the act of March 2, 1895 (28 Stat., 807), mineral surveyors' bonds are examined every two years as to their sufficiency, and new bonds required every four years from their dates, the latter requirement is not because the term has then expired.

11. A mineral surveyor is not authorized to perform any work under his appointment until his official bond shall have been accepted by the Commissioner of the General Land Office. The bond shall be in a sum not less than \$5000, and will become effective and the liability of the principal and surety will begin with the acceptance of the bond by the Commissioner.

12. Bonds can not be canceled, nor can the surety thereto withdraw, to the extent of relieving the surety of liability for defaults during the time the principal performed his duties thereunder. The most that may be done is to relieve the surety of future responsibility by requiring a new bond, or by the retirement from office of the principal, by formal notice from the Commissioner of the General Land Office.

13. Mineral surveyors' bonds will be examined every two years by the surveyor-general as to their sufficiency, and every four years such bonds shall be renewed as provided by the act of March 2, 1895 (28 Stat., 807). Only corporate sureties will be accepted.

14. If at any time the surveyor-general deems the surety on a bond insufficient, he will report the matter to the Commissioner of the General Land Office for instructions, notifying the mineral surveyor of his action, and the mineral surveyor will be required to renew his bond within sixty days under penalty of revocation of his appointment, unless satisfactory explanation of delay is offered therefor. Unsatisfactory service, also, will be deemed sufficient cause for a revocation of an appointment, but

the surveyor-general's action therein, subject to appeal, will require the approval of the Commissioner of the General Land Office.

15. The acceptance of a bond will be based upon an evident desirability or necessity therefor, and, prior to an acceptance of such bond, the principal will be required to make satisfactory explanation to the surveyor-general, supporting his tender of same.

INSTRUCTIONS TO MINERAL SURVEYORS

GENERAL

1. All official communications must be addressed to the *surveyor-general*.* You will always refer to the date and subject-matter of the letter to which you reply, and when a mineral claim is the subject of correspondence, you will give the name and survey number.

2. You should keep a complete record of each survey made by you, and of the facts coming to your knowledge at the time, as well as copies of all your field notes, reports, and official correspondence, in order that such evidence may be readily produced when called for at any future time.

3. Field notes and other reports must be written in a clear and legible hand or typewritten, in noncopying ink, and upon the proper blanks gratuitously furnished you by the surveyor-general's office upon application. *No interlineations or erasures* will be allowed, and no abbreviations or symbols must be used, except such as are indicated in the specimen field notes.

4. No return by you will be recognized as official unless it is over your signature as a United States mineral surveyor and made in pursuance of a special order from the surveyor-general's office. After you have received an order for survey, you are required to make the survey and return correct field notes thereof to the surveyor-general's office without delay.

5. The claimant is required, in all cases, to make satisfactory

*For list of offices of surveyors-general in mining districts, see page 285.

arrangements with you for the payment for your services and those of your assistants in making the survey, as the United States will not be held responsible for the same. You will call the attention of applicants for mineral-survey orders to the requirements of paragraph 12 of the circular, page 309. (Sec. 2334, U. S. Rev. Stats., par. 90, Mining Circular, May 21, 1907.)

6 You will promptly notify the surveyor-general's office of any change in your post-office address. (20 L. D., 163.)

7. You are precluded from acting, either directly or indirectly, as attorney in mineral claims. Your duty in any particular case ceases when you have executed the survey and returned the field notes and preliminary plat, with your report, to the surveyor-general. You will not be allowed to prepare for the mining claimant the papers in support of his application for patent, or otherwise perform the duties of an attorney before the land office in connection with a mining claim. You are not permitted to combine the duties of surveyor and notary public in the same case by administering oaths to the parties in interest. It is preferable that both preliminary and final oaths of assistants should be taken before some officer duly authorized to administer oaths, other than the mineral surveyor. In cases, however, where great delay, expense, or inconvenience would result from a strict compliance with this rule, you are authorized to administer the necessary oaths to your assistants, but in each case where this is done, you will submit to the proper surveyor-general a full written report of the circumstances which required your stated action; otherwise you must have absolutely nothing to do with the case, except in your official capacity as surveyor.

THE FIELD WORK

8. The survey made and reported must, in every case, be an actual survey on the ground in full detail, made by you in person after the receipt of the order, and without reference to any knowledge you may have previously acquired by reason of having made the location survey or otherwise, and must show the actual facts existing at the time. This precludes you from calculating the connections to corners of the public survey and mineral monuments, or any other lines of your survey through prior

surveys, unless it is satisfactorily shown in your report that you have retraced such lines and found them to be correct. (6 L. D., 718; 7 L. D., 81.)

The term *survey* in these instructions applies not only to the usual fieldwork, but also to the examinations required for the preparation of your affidavits of \$500 expenditure, descriptive reports on placer claims, and all other reports.

SURVEY AND LOCATION

9. The survey of a mining claim may include several contiguous locations owned in common, but such survey must, in conformity with statutory requirements, distinguish the several locations, and exhibit the boundaries of each. (5 L. D., 199; 6 L. D., 808; 29 L. D., 585.)

10. The survey must be made in strict conformity with, or be embraced within, the lines of the location upon which the order is based. If the survey and location are identical, that fact must be clearly and distinctly stated in your field notes. If not identical, a bearing and distance must be given from each established corner of the survey to the corresponding corner of the location, and the location corner must be fully described, so that it can be identified. The lines of the location, as found upon the ground, must be laid down upon the preliminary plat in such a manner as to contrast and show their relation to the lines of survey. (1 L. D., 581.)

The survey will be given but one number. A location under the mining laws can legally be made only of a tract or piece of land embraced within one set of boundary lines; and two or more tracts merely cornering with each other can not legally be embraced in a single location. (33 L. D., 560; 35 L. D., 485.)

11. In accordance with the principle that courses and distances must give way when in conflict with fixed objects and monuments, you will not under any circumstances change the corners of the location for the purpose of making them conform to the description in the record. If the difference from the location be slight, it may be explained in the field notes.

The act of Congress of May 10, 1872, expressly provides that "the location must be distinctly marked upon the ground so that

its boundaries can be readily traced," and "that all records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or claims located, by reference to some natural object or permanent monument, as will identify the claim." (Sec. 2324, U. S. Rev. Stats.)

These provisions of the law must be strictly complied with in each case to entitle the claimant to a survey and patent, and, therefore, should a claimant under a location made *subsequent* to the passage of the act of May 10, 1872, *who has not complied with said requirements in regard to marking the location upon the ground and recording the same, apply for a survey, you will decline to make it.* (1 L. D., 581.) You will then report the facts to the surveyor-general and await further instructions.

Should the survey be applied for under a location made prior to May 10, 1872, under section 2332, United States Revised Statutes, in making the survey thereof you will be governed by the special instructions accompanying the order for survey.

No mining claim located subsequent to May 10, 1872, should exceed the statutory limit in width on each side of the centre of vein, or 1,500 feet in length, and all surveys must close within 50 to 100 feet in 1,000 feet, and the error must not be such as to make the location exceed the statutory limit; and in absence of other proof the discovery point is held to be the centre of the vein on the surface. The course and length of the vein should be marked upon the plat and specifically described in the field notes.

LODE LINE AND END LINES

It was held (syllabus) in 35 L. D., 22, that—

There is no warrant in the mining laws for extending, arbitrarily and without any basis of fact therefor, the vein or lode line of a location in an irregular and zigzag manner for the purpose of controlling the length or situation of the exterior lines of the location to suit the convenience, real or imagined, of the locator.

The end lines of a lode location must be straight and parallel to each other and when at right angles with the side lines may not exceed six hundred feet in length.

The mining law contemplates that the end lines of a lode claim

shall have substantial existence in fact, and in length shall reasonably comport with the width of the claim as located.

INSTRUMENT

12. All mineral surveys must be made with a *transit*, either with or without a solar attachment, by which the meridian can be determined independently of the magnetic needle, and all courses must be referred to the true meridian. The variation should be noted at each corner of the survey.

THE TRUE MERIDIAN

13. The true course of at least one line of each survey must be ascertained by astronomical observations, i. e., either Polaris or sun observations, made at the time of the survey; the data for determining the same and details as to how these data were arrived at must be given. Or, in lieu of the foregoing, the survey must be connected with some line the true course of which has been previously established beyond question, and in a similar manner by yourself, and, when such lines exist, it is desirable in all cases that they should be used as a proof of the accuracy of subsequent work. In this connection you will be governed by the instructions for methods of obtaining a true meridian.

CONNECTIONS

14. Connect corner No. 1 of each location embraced in your survey by course and distance with nearest corner of the public survey or with a United States mineral monument if the claim lies within 2 miles of such corner or monument. If both are within the required distance, you must connect with the nearest corner of the public survey. (7 L. D., 475; paragraph 36, Mining Circular, May 21, 1907.)

(a) You will make surveys and connections of mineral claims in suspended townships, so long as they remain suspended, in the same manner as though the claims were upon unsurveyed land, except as hereinbefore specified, by connecting them with independent mineral monuments. *At the same time you will note the position of any public land corner which may be found in the neighborhood of the claim, so that, in case of the release*

of the township plat from suspension, the position of the claim can be shown on the plat.

(b) A mineral survey must not be returned with its connection made only with a corner of the public survey, where the survey of the township within which it is situated is under suspension, nor connected with a mineral monument alone when situated within the limits of a township or within 2 miles of a corner thereof the regularity and correctness of the survey of which is unquestioned.

If a mining claim is situated within the limits of a township, the regularity and correctness of the survey of which is unquestioned, but no corner of the public survey can be found within 2 miles of the claim after diligent search, connection may be made with a mineral monument, the mineral monument to be connected with a regularly established survey corner.

(c) In making an official survey hereafter you will establish corner No. 1 of each location embraced in your survey at the corner nearest the corner of the public survey or mineral monument, unless good cause is shown for its being placed otherwise. If connections are given to both a corner of the public survey and mineral monument, corners Nos. 1 should be placed at the end nearest the corner of the public survey.

15. When a boundary line of a *mineral* claim intersects a section line, give courses and distances from the points of intersection to the corners of the public surveys at each end of the half mile of section line so intersected.

MINERAL MONUMENTS

16. In case your survey is situated in a district where there are no corners of the public survey and no monuments within the prescribed limits, you will proceed to establish a mineral monument, in the location of which you will exercise the greatest care to insure permanency as to site and construction.

The site, when practicable, should be some prominent point, visible for a long distance from every direction, and should be so chosen that the permanency of the monument will not be endangered by snow, rock or landslides, or other natural causes. Its position with reference to latitude and longitude should be

determined and stated as accurately as the instruments used will permit.

17. The monument should consist of a stone not less than 30 inches long, 20 inches wide, and 6 inches thick, set halfway in the ground, with a conical mound of stone 4 feet high and 6 feet base alongside. The letters U.S.M.M., followed by the consecutive number of the monument in the district, must be plainly chiseled upon the stone. If impracticable to obtain a stone of required dimensions, then a post 8 feet long, 6 inches square, set 3 feet in the ground, scribed as for a stone monument, protected by a well-built conical mound of stone of not less than 3 feet high and 6 feet base around it, may be used. The exact point for connection must be indicated on the monument by a + chiseled thereon; if a post is used, then a tack must be driven into the post to indicate the point. Any necessary departure from the prescribed material and size of monument must be fully explained.

18. From the monument connections by course and distance must be taken to two or three bearing trees or rocks, and to any well-known and permanent objects in the vicinity, such as the confluence of streams, prominent rocks, buildings, shafts, or mouths of adits. Bearing trees must be properly scribed B T and bearing rocks chiseled B R together with the number of the mineral monument; the exact point on the tree or stone to which the connection is taken should be indicated by a cross or other unmistakable mark. Bearings should also be taken to prominent mountain peaks, and the approximate distance and direction ascertained from the nearest town or mining camp. A detailed description of the mineral monument, with a topographical map of its location, should be furnished the General Land Office.

Where practicable, it is desired that mineral surveyors connect by course and distance with mineral monuments in the vicinity other than those prescribed for connections as being within the limitation of distance. The purpose of this is to enable the General Land Office to locate the various mineral monuments established and used prior to the extension of the public subdivisional surveys over the land.

CORNERS

19. Corners may consist of—

(1) A stone at least 24 inches long set 12 inches in the ground, with a conical mound of stone $1\frac{1}{2}$ feet high, 2 feet base, alongside, and state kind of stone set for corner. A stone should always be used for a corner when possible.

(2) A post at least 3 feet long by 4 inches square, set 18 inches in the ground and surrounded by a substantial mound of stone or earth.

(3) A rock in place.

Should it become necessary to vary from these instructions, your returns must contain a full statement of the reason for establishing a corner differing from those prescribed.

20. All corners must be established in a permanent and workmanlike manner, and the corner and survey number must be neatly chiseled or scribed on the sides facing the claim. The *exact* corner point must be permanently indicated on the corner. When a rock in place is used its dimensions above ground must be stated, and a cross chiseled at the exact corner point.

21. In case the point for the corner be inaccessible or unsuitable, you will establish a witness corner, which must be marked with the latter W C in addition to the corner and survey number. The witness corner should be located upon a line of the survey and as near as possible to the true corner with which it must be connected by course and distance. The reason why it is impossible or impracticable to establish the true corner must always be stated in the field notes, and in running your next course state whether you start from the true place for corner or from witness corner.

22. The identity of all corners should be perpetuated by taking courses and distances to bearing trees, rocks, and other objects, as prescribed in the establishment of mineral monuments, and when no bearings are given, state "no bearings available." Permanent objects should be selected for bearings whenever possible.

23. If an official mineral survey has been made in the vicinity, within a reasonable distance, a further connecting line should

be run to some corner thereof; and in like manner all conflicting surveys and locations should be so connected, and the corner with which connection is made in each case described. Such connections will be made and conflicts shown according to the boundaries of the neighboring or conflicting claims as each is marked, defined, and actually established upon the ground. You will fully and specifically state in your returns *how* and by what *visible evidences* you were able to identify on the ground the several conflicting surveys and those which appear according to their returned tie or boundary lines to conflict, if they were so identified, and report errors or discrepancies found by you in any such surveys. In the survey of contiguous claims which constitute a consolidated group, where corners are common, bearings should be mentioned but once.

Tubular iron posts with flaring base, cement core, and brass cap for marking with steel stamps, have been adopted for agricultural public-land-survey corners, and it is believed that, wherever possible, the establishment of similar corners for mineral surveys would add greatly to the value of the survey made. Such corners are identified at a glance, may be accurately set, are difficult to move, easily found, and are indestructible. Their use is recommended.

TOPOGRAPHY

24. Note carefully all topographical features of the claim, taking distances on your lines to intersections with all streams, gulches, ditches, ravines, mountain ridges, roads, trails, etc., with their widths, courses, and other data that may be required to map them correctly. If the claim lies within a townsite, locate all municipal improvements, such as blocks, streets and buildings.

CONFLICTS

25. If, in running the exterior lines of a claim, the survey is found to conflict with the survey of another claim, the distance to the points of intersection, and the courses and distances along the line intersected from an established corner of such conflicting claim to such points of intersection, should be described in the field notes: *Provided*, That where a corner of the conflicting

survey falls within the claim being surveyed, such corner should be selected from which to give the bearing, otherwise the corner nearest the intersection should be taken. The same rule should govern in the survey of claims embracing two or more locations the lines of which intersect.

LODE AND MILLSITE

26. A lode and millsite claim in one survey will be distinguished by the letters A and B following the number of the survey. The corners of the millsite will be numbered independently of those of the lode. Corner No. 1 of the millsite must be connected with a corner of the lode claim as well as with a corner of the public survey or mineral monument.

FIELD NOTES

27. In order that the results of your survey may be reported in a uniform manner, you will prepare your field notes and preliminary plat in strict conformity with the specimen field notes and plats, which are made part of these instructions. They are designed to furnish you all the needed information concerning the manner of describing the boundaries, corners, connections, intersections, conflicts, and improvements, and stating the variation, area, location, and other data connected with the survey of mineral claims, and certain forms of affidavits for the surveyor and his assistants.

28. When a placer claim includes lodes, or when several contiguous placer or lode locations are included as one claim in one survey, you will give to the corners of each location constituting the same a separate consecutive numerical designation, beginning with corner No. 1 in each case. In the former case, you will first describe the placer claim in your field notes.

29. Throughout the description of the survey, after each reference to the lines or corners of a location, give the name thereof, and if unsurveyed state the fact. If reference is made to a location included in a prior official survey, the survey number must be given, followed by the name of the location. Describe your corners once only.

30. The total area of each location in a group embraced by

its exterior boundaries, and also the area in conflict with each intersecting survey or claim, should be stated. The area claimed will not be stated. But when locations of the survey conflict with each other such conflicts should only be stated in connection with the location from which the conflicting area is excluded.

The field notes and plat of survey should not show *exclusions*, or attempt to specify the *net area* of the claim. These are matters for the applicant to state in connection with his application for patent, and the notices posted and published. The field notes should merely show the total and net areas of conflict, so that any exclusion desired may be readily made.

31. You will state particularly whether the claim is upon surveyed or unsurveyed public lands, giving in the former case the quarter sections, township, and range in which it is located, and in the latter, the township and range as near as can be determined. When upon surveyed lands the section lines should be indicated by full lines and the quarter-section lines by dotted lines.

32. The title page must contain the post-office address of the claimant or his authorized agent.

EXPENDITURE OF \$500

33. In making out your certificate of the value of the improvements, you will follow the form prescribed in the specimen field notes.

34. Only *actual* expenditures and *mining* improvements made by the claimant or his grantors, having a direct relation to the development of the claim, can be included in your estimate. "Labor or improvements, within the meaning of the statute, are deemed to have been had on a mining claim, whether it consists of one location or several, when the labor is performed or the improvements are made for its development, that is, to facilitate the extraction of the metals it may contain." (6 L. D., 222.)

35. The expenditures required may be made from the surface or in running a tunnel, drifts, or cross-cuts, for the development of the claim. Improvements of any other character, such as

buildings, machinery, or roadways, must be excluded from your estimate unless you show clearly that they are associated with actual excavations, such as cuts, tunnels, shafts, etc., are essential to the practical development of, and actually facilitate the extraction of mineral from the claim.

36. You will locate all mining and other improvements upon the claim by courses and distances from corners of the survey, or from points on the indicated lode line, or side lines, specifying with particularity and detail the dimensions and character of each, and the improvements upon each location should be numbered consecutively, the point of discovery being always No. 1. Improvements made by a former locator, who has abandoned his claim, can not be included in the estimate, but should be described and located by separate statement, in the notes and on the plat.

37. You will give in detail the *value* of each mining improvement included in your estimate of expenditures, and when a tunnel or other improvement has been made for the development of other claims in connection with the one for which survey is made, you must give the name, ownership, and survey number, if any, of each claim to be credited, and the value of the interest credited to each claim.

38. In case of a lode and mill site in the same survey, an expenditure of \$500 is required to be shown upon the lode claim only.

COMMON IMPROVEMENTS, ETC.

39. When a survey embraces several locations held in common constituting one entire claim whether lode or placer, an expenditure of \$500 for each location embraced in the survey will be sufficient.

It was held (syllabus) in 35 L. D., 361, that—

Where several contiguous mining claims are held in common and expenditures are made upon an improvement intended to aid in the common development of all of the claims so held, and which is of such character as to redound to the benefit of all, such improvement is properly called a common improvement.

Each of a group of contiguous mining claims held in common and developed by a common improvement has an equal, undivided interest in such improvement, which is to be determined

by a calculation based upon the number of claims in the group and the value of the common improvement.

There is no authority in the law for an unequal assignment of credits out of the cost of an improvement made for the common benefit of a number of mining claims, or the apportionment of a physical segment of an improvement of that character to any particular claim or claims of the number, such an arbitrary judgment of credits, as the exigencies of the case may seem to require, being utterly at variance with the essential idea inherent in the term, a common improvement.

In any patent proceedings where a part of a group of mining claims is applied for and reliance is had upon a common improvement, the land department should be fully advised as to the total number of claims embraced in the group, as to their ownership, and as to their relative situations, properly delineated upon an authenticated map or diagram. Such information should always be furnished in connection with the first proceeding involving an application of credit from the common improvement, and should be referred to and properly supplemented in each subsequent patent application in which a like credit is sought to be applied.

IMPROVEMENTS SUCCEED LOCATIONS, ETC.

It was also held (syllabus) in 36 L. D., 551, that—

A common improvement or system, offered for patent purposes, although of sufficient aggregate value and of the requisite benefit to all the mining claims of a group, can not be accepted as it then stands in full satisfaction of the statutory requirements as to such of the claims the location of which it preceded, the law requiring that an expenditure of at least \$500 shall *succeed* the location of every claim.

If the requisite benefit to the group is shown, or to the extent of such of the claims as are so benefited, and the elements of contiguity and common interest in the claims concerned appear; if the improvement represents a total value sufficient for patent purposes for the number of claims so involved; if for each claim located after the partial construction of the improvement the latter has been subsequently extended so as to represent an added value of not less than \$500, each is entitled under the law to a share of the value of the common improvement in its entirety, no claim receiving more or less than another from that source, participating therein without distinction or difference, and as to each the statutory requirement is satisfied.

40. The explanatory statement in such cases should be given in your field notes, or affidavit, at the conclusion of the descrip-

tion of the improvements included in the estimate of expenditure, and should be as full and explicit as the facts in the case warrant, dealing only with the improvements, conditions, and circumstances as they actually existed at the time of making the survey or examination.

41. If the value of the labor and improvements upon a mineral claim is less than \$500 at the time of survey, you are authorized to file thereafter supplemental proof, showing \$500 expenditure made prior to the expiration of the period of publication. The information on which to base this proof must be derived by the surveyor, who makes the actual survey, from a careful examination upon the premises.

42. You will file with your field notes a preliminary plat made on tracing cloth, protracted on a scale of 200 feet to an inch, if practicable, in conformity with the specimen plat herewith. In preparing plats make the top north. Copy of your calculations of areas by double meridian distances and all triangulations or traverse lines must also be furnished. The lines of the claim surveyed, on this plat and on all plats of *approved* surveys, should be heavier and show a contrast with conflicting claims.

ERRORS

43. Where error in an original survey appears prior to the issuance of patent, the surveyor, who made such survey, will be required to make the necessary corrections in the field within a specified time; and failure or refusal, without satisfactory reason therefor, to comply with instructions will be followed by suspension or revocation of appointment. The mineral claimant will be notified of the action taken and given a reasonable time to apply for an amended survey.

Whenever a survey is reported in error by a surveyor, the surveyor who made the survey will be required promptly to examine same upon the ground, and, if found in error, will report the errors in detail, under oath, to the surveyor-general's office. If he should report his survey correct, a joint survey with the surveyor who reported the errors will be ordered to settle the differences.

JOINT SURVEY

44. A joint survey must be made within ten days after the date of order, unless satisfactory reasons are submitted, under oath, for a postponement.

45. The fieldwork must in every sense of the term be a *joint* and not a separate survey, and the observations and measurements taken with the same instrument and chain, previously tested and agreed upon.

46. The surveyor found in error, will make out the field notes of the joint survey, which, after being duly signed and sworn to by both parties, must be transmitted to the surveyor-general's office.

AMENDED SURVEYS

47. Inasmuch as amended surveys are ordered only by special instructions from the General Land Office, and the conditions and circumstances peculiar to each separate case, and the object sought by the required amendment, alone govern all special matters relative to the manner of making such survey and the form and subject-matter to be embraced in the field notes thereof, but few general rules applicable to all cases can be laid down.

48. The amended survey must be made in strict conformity with, or be embraced within, the lines of the original survey. If the amended and original surveys are identical, that fact must be clearly and distinctly stated in your field notes. If not identical, a bearing and distance must be given from each established corner of the original survey. The lines of the original survey, as found upon the ground, must be laid down upon the preliminary plat in such manner as to contrast and show their relation to the lines of the amended survey.

49. The field notes of the amended survey must be prepared on the same size and form of blanks as are the field notes of the original survey, and the word "amended" must be used before the word "survey" wherever it occurs in the field notes.

DESCRIPTIVE REPORTS ON PLACER CLAIMS

50. By General land Office circular, approved May 21, 1907, paragraph 60, you are required to make a full examination of

all placer claims at the time of survey, and file with your field notes a descriptive report, in which you will describe:

(a) The quality and composition of the soil, and the kind and amount of timber, and other vegetation.

(b) The location and size of streams, and such other matter as may appear upon the surface of the claims.

(c) The character and extent of all surface and underground workings, whether placer or lode, for mining purposes, locating and describing them.

(d) The proximity of centers of trade or residence.

(e) The proximity of well-known systems of lode deposits or of individual lodes.

(f) The use or adaptability of the claim for placer mining, and whether water has been brought upon it in sufficient quantity to mine the same, or whether it can be procured for that purpose.

(g) What works or expenditures have been made by the claimant or his grantors for the development of the claim, and their situation and location with respect to the same as applied for.

(h) The true situation of all mines, salt licks, salt springs, and mill-seats, which comes to your knowledge, or report that none exist on the claim, as the facts may warrant.

(i) Said report must be made under oath, and duly corroborated by one or more disinterested persons.

51. Descriptive reports, as above, on placer claims taken by legal subdivisions will not be made, as mineral surveyors have no duties to perform touching such claims. (Sec. 2331, U. S. Rev. Stats., and paragraph 58, Mining Circular, approved May 21, 1907.)

PRACTICE

52. Claimants, their attorneys, or parties in interest shall not be employed as assistants in making mineral surveys.

53. Your fieldwork must be accurately and properly performed and your returns made in conformity with the foregoing instructions. Errors in the survey must be corrected at your own expense, and if the time required in the examination of your returns is increased by reason of your neglect or carelessness, you will be required to make an additional deposit for office

work. You will be held to a strict accountability for the faithful discharge of your duties, and will be required to observe fully the requirements and regulations in force as to making mineral surveys. If found incompetent as a surveyor, careless in the discharge of your duties, or guilty of a violation of said regulations, your appointment will be promptly revoked.

A mineral surveyor is within the purview of section 452 of the Revised Statutes, which prohibits officers, clerks, and employees in the General Land Office from directly or indirectly purchasing or becoming interested in the purchase of any of the public lands, upon penalty of forfeiture of his official position. (36 L. D., 61.)

CIRCULAR TO APPLICANTS

Applicants for mineral survey orders will observe the following requirements in the conduct of their business with the surveyor-general's office, the same being based upon the United States mining laws, and circular and special instructions from the Commissioner of the General Land Office:

1. All applications for survey orders, descriptive reports on placer claims, or certificates of \$500 expenditures, should be addressed to the surveyor-general,* and be signed by the claimants, their agents or attorney.

2. Each application should contain:

(a) The name of the claimant in full, and as it is desired to appear in the application for the patent.

(b) The name of the land and mining districts in which the claim is located.

(d) The name of the mineral surveyor to whom it is desired the order shall be issued.

(For form of application see page 311.)

3. The applicant is required to file with each application for survey order a copy of the record of location of the claim, properly certified by the recorder of the county or mining district where the claim is situate.

4. The mineral surveyor is required to survey the claim in *strict conformity* with or *within* the lines of the location upon which the order of survey is based. The applicant is therefore advised, before filing his application, to see that his location has been made in compliance with the law and regulations, and that it properly describes the claim for which patent is to be sought.

Section 2324, United States Revised Statutes, expressly provides that "the location must be distinctly marked on the ground so that its boundaries can be readily traced," and that

*See page 285 for list of offices of United States surveyors-general.

"all records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or claims located by reference to some natural object or permanent monument as will identify the claim."

These provisions of the law must be strictly complied with in each case, to entitle a claimant to a survey and patent, and therefore should a claimant under a location made *subsequent* to the passage of the mining act of May 10, 1872 (referred to in said section 2324), who has not complied with said requirements in regard to marking the location upon the ground, and recording the same, apply for a survey, the surveyor-general will decline to order it.

The only relief for a party under such circumstances will be to make a new location in conformity to law and regulations, as no survey will be approved by the surveyor-general's office, unless these and all other provisions of law are substantially complied with.

A lode locator may not, in the same location, lawfully include any surface area, or acquire any incidental mining rights therein, outside of the course of, or vertical planes drawn downward through, the established end lines of his claim extended in their own direction. (35 L. D., 592.)

5. The surveyor-general will furnish the applicant an estimate of the cost of the *platting* and other *office work* connected with the survey in his office, which amount the applicant will deposit with any assistant United States treasurer, or designated depository, in favor of the United States Treasurer, to be passed to the credit of the fund created by "individual depositors for surveys of the public lands." The duplicate certificate issued for such deposit will be immediately forwarded to the office of the surveyor-general by the applicant who will retain the triplicate certificate for his own use and security. Under no circumstances can this deposit be made with or by the surveyor-general.

Payment for *exemplified copies* of plats or other records in the office of the surveyor-general will be made or remitted

directly to that officer, who will promptly receipt for the same. (36 L. D., 125.)

6. The various surveyors-general have schedules of rates for office work, and an estimate of the cost in any particular case may be had upon application.

Should an applicant deem an estimate excessive, he will be allowed the right of appeal to the General Land Office in the usual manner.

In transmitting such an appeal the surveyor-general should transmit therewith a full report.

7. An application for an amended survey order must be accompanied with a statement setting forth fully the reasons for the proposed amendment and all the material facts in the matter.

8. If, after having obtained a survey order, the applicant should abandon his purpose of having a survey made, he can apply the deposit, less the amount estimated for office expenses already incurred, on a survey of *another claim* if one is desired.

9. Upon discovery of any error or defect in an order the applicant is requested to return it to the surveyor-general's office for correction or amendment.

10. If, after having obtained an order for survey, the applicant should find that the record of location does not practically describe the location as staked upon the ground, he should file a certified copy of an amended location certificate, correctly describing the claim, and obtain an *amended order* for survey.

11. The order of approval of surveys of mineral claims is prescribed by General Land Office circular dated March 3, 1881, as follows:

The mining survey first applied for shall have the priority of action in all its stages in the office of the surveyor-general including the delivery thereof, over any other survey of the same ground or any portion thereof.

The surveyor-general should not order or authorize a survey of a claim which conflicts with one previously applied for until the survey first applied for has been completed, examined, approved, and platted, and the plats delivered, unless the survey first authorized is not returned within a reasonable period, and the applicant for a conflicting survey makes affidavit that he

believes (stating the reasons for his belief) that such first applicant has abandoned his purpose of having a survey made, or is deferring it for vexatious purposes, to wit, to postpone the subsequent applicant, in which case the surveyor-general shall give notice of such charges to such first applicant, and call upon him for an explanation under oath of the delay. He shall also require the mineral surveyor to make a full statement in writing, explanatory of the delay; and if the surveyor-general shall conclude that good and sufficient reasons for such delay do not exist, he shall authorize the applicant for the conflicting survey to proceed with the same; otherwise the order of proceedings shall not be changed.

When the conflict does not appear until the field notes of the respective surveys are returned, then the survey first applied for should be first examined, approved, and platted, and the plats delivered before the field notes of the survey last applied for are taken up for examination or plats constructed.

Whenever an applicant for a survey shall have reason to suppose that a conflicting claimant will also apply for a survey for patent, he may give a notice in writing to the surveyor-general particularly describing such conflicting claim, and file a copy of the notice of location of such conflicting claim. In such case the surveyor-general will not order or authorize any survey of such conflicting claim until the survey first applied for has been examined, completed, approved, and platted, and the plats delivered.

12. The applicant has the option of employing any United States mineral surveyor in the district to execute the order of survey, and must make satisfactory arrangements with such surveyor for the payment of his services and those of his assistants in making the survey, as the United States will not be held responsible for the payment of the same. The duty of the surveyor in any particular case ceases when he has executed the survey and filed his returns of survey in the surveyor-general's office. He is not allowed to prepare for the mining claimant the papers in support of an application for patent, being precluded from acting either directly or indirectly as attorney in mineral claims. (Sec. 2334, U. S. Rev. Stats.)

13. The applicant is advised of his right to appeal to the Commissioner of the General Land Office from the approval or disapproval of the survey of his claim. The appeal must be in writing or in print, should set forth in brief and clear terms the specific points of exception to the ruling appealed from, and should be transmitted through the surveyor-general's office.

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SPECIMEN FIELD NOTES AND FORMS

[4—689.]

APPLICATION TO UNITED STATES SURVEYOR-GENERAL FOR SURVEY OF MINING CLAIMS.

.....,

....., 19..

UNITED STATES SURVEYOR-GENERAL,

.....

SIR:, claimant—, hereby make.. application for an official survey, under the provisions of chapter 6, title 32, of the Revised Statutes of the United States, and regulations and instructions thereunder, of the mining claim known as the, situate in mining district, county,, in section, township No., range No. Said claim is based upon a valid location made on, 19.., and duly recorded on, 19.., and is fully described in the duly certified copy of the record of the location certificate, filed herewith. Said certificate contains the name of the locator, the date of location, and such a definite description of the claim by reference to natural objects or permanent monuments as will identify the claim, and said location has been distinctly marked by monuments on the ground, so that its boundaries can be readily traced.

..... request that you will send an estimate of the amount required to defray the expenses of platting and other work in your office, required under the regulations, that may make proper deposit therefor, and that thereupon you will cause the survey to be made by, United States mineral surveyor, and proper action to be taken thereon by your office, as required by the United States mining laws and regulations thereunder.

....., *Claimant.*

P. O. address.....

..... county,

.....

[4—682.]

ORDER FOR MINERAL SURVEY.

DEPARTMENT OF THE INTERIOR,

OFFICE OF U. S. SURVEYOR-GENERAL,

.....,

....., 19..

To ,

U. S. Mineral Surveyor,

.....

SIR: Application has been filed in this office by, dated, 19.., for an official survey of the mining claim of, known as the, situate in mining district, county, in section, township No., range No., which claim is based upon a location made on, 19.., and duly recorded on, 19.., and is fully described in the duly certified copy of the record of the location certificate, filed by the applicant.. for said survey, a copy of which is herewith inclosed. You are hereby directed to make the survey of said claim in strict conformity with existing laws, official regulations, and instructions thereunder, and to make proper return to this office. Said survey will be designated as Survey No.

Very respectfully,

.....,

U. S. Surveyor-General for

• —————

[4—683.]

SPECIMEN FIELD NOTES.

Mineral Survey No. 20,000, A and B.

Lot No.

Montrose Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

The Noonday Tunnel Gold Mining and Milling Company,

KNOWN AS THE

Matchless, Mascot, Noonday, Bryan and Little Olive Lodes,

and

..... Bryan Mill Site

..... Gold Brick Mining District,

Gunnison County, Colorado.

Sections 12 and 13, Township 50 N,

Range 3 E. of N. M. P. M.

Surveyed under instructions dated December 1, 1906,

By O. M. THAYER,
U. S. Mineral Surveyor.

Claim located, 1.....

Survey commenced May 6, 1907.

Survey completed May 11, 1907.

Address of claimant:

E. J. BROWN, *Secretary,*
Pueblo, Colorado.

DATES OF AMENDED LOCATIONS.

Matchless, Noonday, Bryan, and Little Olive Lodes, May 7, 1906.

Mascot Lode, June 4, 1906.

Bryan Mill Site, May 7, 1906.

SURVEY NO. 20,000 A and B.

MATCHLESS LODE.

Beginning at Cor. No. 1.

On line 2-3, Mascot lode, of this survey.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAT. 1-20000 A, whence

The NE. Cor., T. 50 N., R. 3 E., of N. M. P. M., bears N $18^{\circ} 53' 20''$ E., 9,175.32 ft.

FEET.

Thence N. $51^{\circ} 45'$ W.

250.7

To Cor. No. 2.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAT. 2-20000 A.

Thence S. $25^{\circ} 06'$ W.

535.68

Intersect line 4-1, Noonday lode, of this survey.

1,006.10

Intersect line 2-3, Noonday lode, of this survey.

1,016

To Cor. No. 3.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAT. 3-20000 A.

Thence S. $51^{\circ} 45'$ E.

10.32

Intersect line 2-3, Noonday lode, of this survey.

250.7

To Cor. No. 4.

On line 2-3, Mascot lode, of this survey.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAT. 4-20000 A, whence

Cor. No. 4, Noonday lode, of this survey, bears S. $47^{\circ} 38'$ E., 276.96 ft.

SURVEY NO. 20,000 A and B—Continued.

MATCHLESS LODE—continued.

Thence N. $25^{\circ} 06'$ E.

FEET.

239.96

1,016

Intersect line 4-1, Noonday lode, of this survey.
To Cor. No. 1, the place of beginning.

MASCOT LODE.

Beginning at Cor. No. 1.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAS. 1-20000 A, whence

The NE. Cor., T. 50 N., R. 3 E., of N. M. P. M., bears N. $16^{\circ} 49' 20''$ E. 8,976.06 ft.

Cor. No. 3, Sur. No. 12479, A. Am. Queen No 2 lode, The Cortland Gold and Silver Mining Company claimant, bears S $39^{\circ} 49' 30''$ W. 406.88 ft.

Cor. No. 3, Sur. No. 17854, Grant lode; The Cortland Gold and Silver Mining Company claimant, bears S. $40^{\circ} 28'$ W. 562.25 ft.

Cor. No. 1, Sur. No. 17854, Brown lode, bears S. $6^{\circ} 44'$ W. 490 ft.

Thence N. $64^{\circ} 54'$ W.

123.90

Intersect line 3-4, Sur. No. 17854, Grant lode, at N. $27^{\circ} 45'$ E. 542.73 ft. from Cor. No. 3.

207.88

Intersect line 3-4, Sur. No. 12479, A. Am. Queen No. 2 lode, at N. $10^{\circ} 14'$ E. 407.15 ft. from Cor. No. 3.

300

To Cor. No. 2

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAS. 2-20000 A.

SURVEY NO. 20,000 A and B—Continued.

MASCOT LODGE—continued.

FEET.

Thence S. 25° 06' W.

238.77	Co. No. 1, Matchless lode, of this survey.
1,014.81	Intersect line 4-1, Noonday lode, of this survey.
1,254.77	Cor. No. 4, Matchless lode, of this survey.
1,374	To Cor. No. 3.
	A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAS. 3-20000 A.

Thence S. 64° 54' E.

229.72	Intersect line 3-4 and 1-2, Noonday and Bryan lodes, of this survey, respectively.
292.39	Intersect line 4-1, Bryan lode, of this survey.
300	To Cor. No. 4.
	A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed MAS. 4-20000 A, whence
	Cor. Nos. 4-1, Noonday and Bryan lodes, of this survey, respectively, bears N. 18° 43' W. 51.3 ft.

Thence N. 25° 06' E.

324.7	Intersect line 4-5, Sur. No. 17854, Brown lode, at S. 17° 27' W. 11.34 ft. from Cor. No. 5.
869.74	Intersect line 6-1, Sur. No. 17854, Brown lode, at S. 79° 10' E. 140.70 ft. from Cor. No. 6, also
	Intersect line 2-3, Sur. No. 17854, Grant lode, at S. 79° 10' E. 153.73 ft. from Cor. No. 3.
1,006.78	Intersect line 2-3, Sur. No. 12479, A. Am. Queen No 2 lode, at S. 79° 10' E. 106.71 fro mCor. No. 3.
1,374	To Cor. No. 1, the place of beginning.

SURVEY NO. 20,000 A and B—Continued.

NOONDAY LODE.

Beginning at Cor. No. 1.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed N. 1-20000 A, whence

The NE. Cor. T. 50 N., R. 3 E., of N. M. P. M., bears N. 22° 42' 10" E. 9,163.46 ft.

Cor. No. 1, Little Olive lode, of this survey, bears N. 2° 32' 30" E. 323.3 ft.

Thence S. 68° 18' W.

FEET.

29.99

Intersect line 4-1, Little Olive lode, of this survey.

301

To Cor. No. 2.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed N. 2-20000 A.

Thence S. 14° 17' E.

647.84

Intersect line 4-1, Little Olive lode, of this survey.

900.16

Intersect line 2-3, Matchless lode, of this survey.

916

Intersect line 3-4, Matchless lode, of this survey.

1,377

To Cor. No. 3.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed N. 3-20000 A.

Thence N. 68° 18' E.

250.22

Intersect line 3-4, Mascot lode, of this survey.

301

To Cor. No. 4.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed N. 4-20000 A.

SURVEY NO. 20,000 A and B—Continued.

NOONDAY LODE—continued.

Thence N. 14° 17' W.

FEET.	
416.84	Intersect lines 2-3 and 4-1, Mascot and Matchless lodes, of this survey, respectively.
801.58	Intersect line 2-3, Matchless lode, of this survey.
1,377	To Cor. No. 1, the place of beginning.

BRYAN LODE.

Beginning at Cor. No. 1.

Identical with Cor. No. 4, Noonday lode, of this survey, whence

The NE. Cor. T. 50 N., R. 3 E., of N. M. P. M., bears N. 18° 05' 10" E. 10,296.64 ft.

Cor. No. 4, Sur. No. 17854, Shields lode, bears S. 12° 06' W. 845.0 ft.

Cor. No. 4, Sur. No. 17854, Brown lode, bears S. 11° 24' W. 695.2 ft.

Cor. No. 3, Sur. No. 12479, B. Am. The Cortland Mill Site, bears S. 8° 55' E. 641.1 ft.

Thence S. 68° 18' W.

50.78	Intersect line 3-4, Mascot lode, of this survey.
301	To Cor. No. 2.
	Identical with Cor. No. 3, Noonday lode, of this survey.

SURVEY NO. 20,000 A and B—Continued.

BRYAN LODGE—continued.

Thence S. 11° 55' E.

FEET.

694	Intersect S. boundary, Sec. 12, at E. 1,950 ft. from SW. Cor said Section.
704.78	Intersect line 4-1, Sur. No. 17854, Shields lode, at N. 59° 28' E. 49.88 ft. from Cor. No. 4.
834	Wagon road, course Northeast and Southwest.
867.73	Intersect line 3-4, Penguin lode, unsurveyed, J. M. Flick, claimant, at S. 44° 07' W. 18.79 ft. from Cor. No. 4.
868.34	Intersect line 2-3, Sur. No. 17854, Shields lode, at N. 59° 28' E. 63.51 ft. from Cor. No. 3.
875	Creek 1 ft. wide, flows Southwest.
1,229.66	Intersect line 1-2, Penguin lode, unsurveyed, at S. 44° 07' W. 138.82 ft. from Cor. No. 1.
1,493.52	To Cor. No. 3. A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed B. 3-20000 A.

Thence N. 68° 18' E.

301

To Cor. No. 4.
A pine stump, about 4 ft. high, hewed to 5 ins. square,
scribed B. 4-20000 A, whence
Cor. No. 1, Penguin lode, unsurveyed, bears N. 43° 55'
W. 342.29 ft.
Cor. No. 3, Pelican lode, unsurveyed, J. M. Flick, claim-
ant, bears N. 43° 42' 20" W. 347.7 ft.

SURVEY NO. 20,000 A and B—Continued.

BRYAN LODE—continued.

Thence N. 11° 55' W.

FEET.	
357.41	Intersect line 2-3, Pelican lode, unsurveyed, at N. 59° 28' E. 193.28 ft. from Cor. No. 3.
673.97	Intersect line 4-1, Pelican lode, unsurveyed, at N. 59° 28' E. 294.70 ft. from Cor. No. 4, also
	Intersect line 2-3, Sur. No. 17854, Shields lode, at N. 59° 28' E. 376.52 ft. from Cor. No. 3.
688	Intersect S. boundary line of Sec. 12 at W. 390 ft. from S. $\frac{1}{4}$ Cor. said Section.
739.72	Intersect line 3-4, Sur. No. 17854, Brown lode, at S. 79° 10' E. 298.38 ft. from Cor. No. 4.
812.48	Intersect line 2-3, Sur. No. 12479, B. Am. The Cortland Mill Site, at S. 51° 20' E. 52.84 ft. from Cor. No. 3.
837.53	Intersect line 4-1, Sur. No. 17854, Shields lode, at N. 59° 28' E. 362.90 ft. from Cor. No. 4.
938.05	Intersect line 3-4, Sur. No. 12479, B. Am. The Cortland Mill Site, at N. 9° 41' E. 91.14 ft. from Cor. No. 3.
970	Creek 1 ft. wide flows Southwest.
1,018	Wagon road, course Northeast and Southwest.
1,344.11	Intersect line 4-5, Sur. No. 17854, Brown lode, at N. 17° 27' E. 561.11 ft. from Cor. No. 4.
1,447.16	Intersect line 3-4, Mascot lode, of this survey.
1,493.52	To Cor. No. 1, the place of beginning.

LITTLE OLIVE LODE.

Beginning at Cor. No. 1.

A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed L. O., 1-20000 A, whence

The NE. Cor. T. 50 N., R. 3 E., of N. M. P. M., bears N. 23° 25' 20" E. 8,860.6 ft.

SURVEY NO. 20,000 A and B—Continued.

LITTLE OLIVE LODE—continued.

Thence N. 77° W.

FEET.

- 243.04 Intersect line 4-5, Sur. No. 7153, Little Dora lode, claimant unknown, at N. 50° E., 40.38 ft. from Cor. No. 4.
- 290.85 Intersect line 3-4, Sur. No. 7153, Little Dora lode, at N. 23° 05' W., 39.91 ft. from Cor. No. 4.
- 291.72 To Cor. No. 2.
A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed L. O., 2-20000 A, whence
Cor. No. 4, Sur. No. 7153, Little Dora lode, bears S. 24° 05' E. 40.43 ft.

Thence S. 6° 28' W.

1503. To Cor. No. 3.
A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed L. O., 3-20000 A.

Thence S. 77° E.

- 272.4 To Cor. No. 4.
A pine post, 4 ft. long, 5 ins. square, set 2 ft. in the ground, with mound of stone, scribed L. O., 4-20000 A.

Thence N. 7° 12' E.

- 430.39 Intersect line 2-3, Noonday lode, of this survey.
- 1164.20 Intersect line 1-2, Noonday lode, of this survey.
- 1500.92 To Cor. No. 1, the place of beginning.

Variation at all corners 14° 10' E.

SURVEY NO. 20,000 A and B—Continued.

LODE LINES.

As near as can be determined from present developments the veins of the several locations embraced in this claim extend as follows from their respective discovery points:

Matchless lode, 458 ft. N. $25^{\circ} 06'$ E., and 558 ft. S. $25^{\circ} 06'$ W.

Mascot lode, 610 ft. N. $25^{\circ} 06'$ E., and 764 ft. S. $25^{\circ} 06'$ W.

Noonday lode, 675 ft. N. $14^{\circ} 17'$ W., and 702 ft. S. $14^{\circ} 17'$ E.

Bryan lode, 347 ft. N. $11^{\circ} 55'$ W., and 1146.52 ft. S. $11^{\circ} 55'$ E.

Little Olive lode, 510 ft. N. $7^{\circ} 33'$ E., and 990 ft. S. $7^{\circ} 33'$ W.

BRYAN MILL SITE SUR. 20000 B

Beginning at Cor. No. 1, identical with a corner of the location.

A pine post, 4 ft. long, 4 ins. square, set 18 ins. in the ground, in mound of stone, scribed B. M. S. 1-20000 B.

Cor. No. 1 of Bryan lode claim bears N. $87^{\circ} 15'$ E. 600 ft.

The N.E. Cor. of T. 50 N., R. 3 E., bears No. $21^{\circ} 15'$ E. 10515.05 ft.

No bearing objects available.

Thence N. 85° W.

FEET.
435.6

To Cor. No. 2, identical with Cor. of location.

A pine post, 4 ins. square, set 18 ins. in the ground in mound of stone, scribed B. M. S. 2-20000 B.

	SURVEY NO. 20,000 A and B—Continued
	BRYAN MILL SITE SUR. 20000 B—continued
	Thence S. 5° W.
FEET.	
500	To Cor. No. 2, identical with Cor. of location. A pine post, 4 ins. square, set 18 ins. in the ground in mound of stone, scribed B. M. S. 3-2000 B.
	—————
	Thence S. 85° E.
435.6	To Cor. No. 4, identical with corner of location. A pine post, 4 ins. square, set 18 ins. in the ground, scribed B. M. S. 4-20000 B.
	—————
	Thence N. 5° E.
500	To Cor No. 1, beginning. Containing 5 acres.

AREA

	Acres.
Total area, Mascot lode.....	9.463
Area in conflict with—	
Tract "A," hereinafter described.....	.189
Sur. No. 12479, A. Am. Queen No. 2 lode...	1.375
Sur. No. 17854, Grant lode.....	1.629
Sur. No. 17854, Grant lode (exclusive of its conflict with Sur. No. 12479, A. Am. Queen No. 2 lode).....	.514
Sur. No. 17854, Grant lode (exclusive of its conflict with Tract A).....	1.440
Sur. No. 17854, Grant lode (exclusive of its conflict with Tract "A," and Sur. No. 12479 A. Am. Queen No. 2 lode).....	.325
Sur. 17854, Brown lode.....	.848

	Acres.
Total area Noonday lode.....	9.434
Area in conflict with—	
Matchless lode of this survey.....	2.017
Mascot lode of this survey.....	1.188
Little Olive lode of this survey.....	1.998
<hr/>	
Total area Bryan lode.....	10.170
Area in conflict with—	
Tract "B," hereinafter described.....	.172
Sur. No. 12479, B. Am. The Cortland Mill Site048
Sur. No. 17854, Brown lode.....	1.909
Sur. No. 17854, Brown lode (exclusive of its conflict with Sur. No. 12479, B. Am. The Cortland Mill Site)	1.861
Sur. No. 17854, Shields lode.....	1.114
Sur. No. 17854, Shields lode (exclusive of its conflict with Sur. No. 12479, B. Am. The Cortland Mill Site).....	1.110
Sur. No. 17854, Shields lode(exclusive of its conflict with Sur. No. 17854, Brown lode)	.976
Sur. No. 17854, Shields lode (exclusive of its conflict with Tract "B").....	.942
Sur. No. 17854, Shields lode (exclusive of its conflict with Sur. No. 12479, B. Am. The Cortland Mill Site, Sur. No. 17854, Brown lode and Tract "B").....	.804
Penguin lode, unsurveyed.....	.542
Penguin lode, unsurveyed (exclusive of its conflict with Sur. No. 17854, Shields lode)	.541
Pelican lode, unsurveyed.....	1.681
Mascot lode of this survey.....	.027

	Acres.
Total area Little Olive lode.....	9.669
Area in conflict with—	
Survey No. 7153, Little Dora lode.....	.017
Total area Matchless lode.....	5.694
Area Bryan Mill Site.....	5.00
The survey of each lode of this location is identical with the respective amended location as staked upon the ground.	

FEET.

TRACT "A"

Beginning at a point on line 2-3, Sur. No. 17854, Grant lode, 153.73 ft. from Cor. No. 3, and on line 4-1, Mascot lode, of this survey, at 869.74 ft. from Cor. No. 4. Thence N. 25° 06' E. 137.04 ft. to a point. Thence N. 79° 10' W. 54.29 ft. to a point. Thence S. 31° 16' W. 141.73 ft. to a point. Thence S. 79° 10' E. 70.00 ft. to the place of beginning, containing 0.189 acre.

TRACT "B"

Beginning at a point on line 2-3, Bryan lode, of this survey, and on line 4-1, Sur. No. 17854, Shields lode at N. 59° 28' E. 49.88 ft. from Cor. No. 4. Thence S. 11° 55' E. 162.95 ft. to a point. Thence N. 44° 07' E. 18.79 ft. to Cor. No. 4, Penguin lode, unsurveyed. Thence S. 30° 35' E. 5.60 ft. to Cor. No. 4, Pelican lode, unsurveyed. Thence N. 59° 28' E. 35.58 ft. to a point on line 2-3. Sur. No. 17854, Shields lode, 117.4 ft. from Cor. No. 3. Thence N. 15° 20' W. 160.62 ft. to a point. Thence S. 59° 28' W. 43.81 ft. to the place of beginning, containing 0.172 acre.

The survey of each lode of this location is identical with the respective amended location as staked upon the ground.

This survey is located in the S. $\frac{1}{2}$ Sec. 12 and the NW. $\frac{1}{4}$ Sec. 13, T. 50 N., R. 3 E., of N. M. P. M.

EXPENDITURE OF FIVE HUNDRED DOLLARS

I certify that the value of the labor and improvements made upon, or for the benefit of, each of the locations embraced in said mining claim by the claimant or its grantors is not less than five hundred dollars, and that said improvements consist of:

The discovery cut of the Matchless lode, the face of which, being the discovery point, is on the lode line 458 ft. from a point on line 1-2, 132.47 ft. from Cor. No. 1, 5 ft. wide, 10 ft. face running S. 60° E. 20 ft. to mouth. From the face is a tunnel, 5 x 7 ft., running N. 60° W. 45 ft., thence S. 30° W. 30 ft.

Value of cut and tunnel, \$850.

No. 1. The discovery tunnel of the Mascot lode, the mouth of which being the discovery point, is on the center line 610 ft. from center of line 1-2, 5 x 7 ft., running S. 72° 30' W. 100 ft.

Value, \$1,000

No. 2. A tunnel, the mouth of which bears from Cor. No. 2, Mascot lode, S. 18° 20' W. 593 ft., 5 x 7 ft., running N. 79° 20' W 205 ft.

Value, \$2,000.

No. 1. The discovery shaft of the Noonday lode, on the center line 675 ft. from the center of line 1-2, 4 x 6., 45 ft. deep, timbered.

Value, \$450.

No. 2. A shaft which bears from Cor. No. 1, Noonday lode, S. 3° 32' E. 772 ft., 4 x 6 ft., 15 ft. deep.

Value, \$150.

No. 3. A tunnel, the mouth of which bears from Cor. No. 4, Noonday lode, S. 77° 10' W. 152 ft., 5 x 7 ft., running N. 14° 17' 450 ft.

Value, \$4,500.

No. 1. The discovery cut of the Bryan lode, the mouth of which being the discovery point, is on the center line 347 ft. from the center of line 1-2, 5 ft. wide, 10 ft. face, running N. 14° W. 15 ft., at the face of which is a shaft 4 x 6 ft., 10 ft. deep.

Value of cut and shaft, \$250.

No. 2. A tunnel, the mouth of which bears from Cor. No. 2, Bryan lode, S. 14° 23' E. 698 ft., 5 x 7 ft., running No. 25° W. 37 ft.

Value, \$370.

No. 1. The discovery shaft of the Little Olive lode, on the lode line 510 ft. from a point on line 1-2, N. 77° W. 141 ft. from Cor. No. 1, 4 x 6 ft., 35 ft. deep, timbered.

Value, \$350.

No. 2. A tunnel, the mouth of which bears from Cor. No. 4, Little Olive lode, N. 42° 40' W. 32 ft., 5 x 7 ft., running N. 145 ft.

Value, \$1,450.

OTHER IMPROVEMENTS

A log cabin, the Northwest corner of which bears from Cor. No. 2, Mascot lode, S. 19° W. 565 ft., 12 x 16 ft. Course of long sides S. 10° 40' W.

A log blacksmith shop, the Northwest corner of which bears from Cor. No. 2, Mascot lode, S. 18° 30' W. 600 ft., 10 x 12. Course of long sides S. 10° 40' W. Both belong to claimant herein.

INSTRUMENT

This survey was made with a C. L. Berger mining transit, No. 3126. The courses were deflected from the true meridian as determined by the direct solar observations. The distances were measured with 100-ft. and 400-ft. steel tapes.

REPORT

The lode line of each location of this claim was run directly upon the ground, and the several corners established by means of offsets from the lode lines. All tie lines were run either directly upon the ground or by traverses, run upon the ground and submitted in a separate report herewith.

The NE. Cor., T. 50 N., R. 3 E., of N. M. P. M., is a granite stone, chiseled with six notches on the East face. Near it are 4 witness trees, blazed and scribed 51—4—31 B. T., 50—3—1 B. T., 50—4—6 B. T., and 51—3—36 B. T. This is the nearest standing corner of the public survey that can be found and identified.

Sur. No. 12479, A. and B. Am. Queen No. 2 lode and The Cortland Mill Site:

All the corners are pine posts, properly set and scribed with the number of the corner and survey. I find all courses and distances to be correct as approved.

Sur. No. 17845, Grant, Brown, and Shields lodes.

All corners are pine posts, properly set and scribed with the numbers of the corner and survey. I find all courses and distances to be correct as approved.

Sur. No. 7153, Little Dora lode:

Corners 3, 4, and 5 are pine posts, properly set and scribed with the number of the corner and survey. I find lines 3-4 and 4-5 to be correct as approved.

NOTE.—The amended location certificate of the Mascot lode fails to furnish the course of line 1-2 and the same is properly given in these field notes.

[4—685.]

FINAL OATHS FOR SURVEYS

LIST OF NAMES

A list of the names of the individuals employed by O. M. Thayer, United States mineral surveyor, to assist in running,

measuring, and marking the lines, corners, and boundaries described in the foregoing field notes of the survey of the mining claim of the Noonday Tunnel Gold Mining and Milling Company, known as the Matchless, Mascot, Noonday, Bryan, and Little Olive lodes, and Bryan mill site, and showing the respective capacities in which they acted,

D. J. LEHAN, *Chainman.*

....., *Chainman.*

....., *Arman.*

....., *Flagman.*

FINAL OATHS OF ASSISTANTS

I, D. J. Lehan, do solemnly swear that I assisted O. M. Thayer, United States mineral surveyor, in marking the corners and surveying the boundaries of the mining claim of the Noonday Tunnel Gold Mining and Milling Company, known as the Matchless, Mascot, Noonday, Bryan, and Little Olive lodes, and Bryan mill site, represented in the foregoing field notes as having been surveyed by said mineral surveyor and under his direction; and that said survey has been in all respects, to the best of my knowledge and belief, faithfully and correctly executed, and the corner and boundary monuments established according to law and the instructions furnished by the United States surveyor-general for Colorado.

D. J. LEHAN, *Chainman.*

....., *Chainman.*

....., *Arman.*

....., *Flagman.*

Subscribed and sworn to by the above-named persons before me this 28th day of May, 1907.

[SEAL.]

RICHARD ROE,

Notary Public,

Gunnison County, Colorado.

My commission expires December 16, 1908.

[4—686.]

FINAL OATH OF UNITED STATES MINERAL SURVEYOR

I, O. M. Thayer, U. S. mineral surveyor, do solemnly swear that, in pursuance of instructions received from the United States surveyor-general for Colorado, dated December 1, 1906, I have, in strict conformity to the laws of the United States, the official regulations and instructions thereunder, and the instructions of said surveyor-general, faithfully and correctly executed the survey of the mining claim of the Noonday Tunnel Gold Mining and Milling Company, known as the Matchless, Mascot, Noonday, Bryan, and Little Olive lodes, and Bryan mill site, situate in Gold Brick mining district, Gunnison County, Colorado, in sections 12 and 13, township No. 50 N., range No. 3 E. of N. M. P. M., and designated as survey No. 20000, A and B, as represented in the foregoing field notes, which accurately show the boundaries of said mining claim as distinctly marked by monuments on the ground, and described in the attached copy of each location certificate, which was received by me from the surveyor-general with said instructions, and that all the corners of said survey have been established and perpetuated in strict accordance with the law, official regulations, and instructions thereunder; and I do further solemnly swear that the foregoing are the true and original field notes of said survey and my report therein, and that the labor expended and improvements made upon or for the benefit of each of the locations embraced in said mining claim by claimant or its grantors are as therein fully stated, and that the character, extent, location, and itemized value thereof are specified therein with particularity and full detail, and that no portion of or interest in said labor or improvements so credited to this claim has been included in the estimate of expenditures upon any other claim.

O. M. THAYER,

United States Mineral Surveyor.

Subscribed and sworn to by the said O. M. Thayer, United States mineral surveyor, before me, a notary public in and for Gunnison County, Colorado, this 28th day of May, 1907.

[SEAL.]

W. W. McKEE,
Notary Public.

My commission expires December 20, 1908.

AMENDED LOCATION CERTIFICATE, LAW OF 1889

STATE OF COLORADO, }
County of Gunnison, } ss.:

KNOW ALL MEN BY THESE PRESENTS, That the Noonday Tunnel Gold Mining and Milling Company, the undersigned, has this 7th day of May, 1906, amended, located, and claimed, and by these presents does amend, locate, and claim, by right of discovery and amended location certificate in compliance with the mining acts of Congress, approved May 10, 1872, and with all subsequent acts, and with section 2409 of the general statutes of Colorado, and with local customs, laws, and regulations, 1,016 linear feet and horizontal measurement on the Matchless lode, vein, ledge, or deposit, along the vein thereof, with all its dips, angles, and variations, as allowed by law, together with 115.12 feet on the westerly and 129 feet on the easterly side of the middle of said vein at the surface, so far as can be determined from present developments, and all veins, lodes, ledges, or deposits, and surface ground within the lines of said claim, 458 feet running N. 25° 06' E. from face of discovery cut and 558 feet running S. 25° 06' W. from face of discovery cut, said discovery cut being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim, in Gold Brick mining district, county of Gunnison, and State of Colorado, described by metes and bounds, as follows, to wit:

Beginning at Corner No. 1, whence the NE. Cor., T. 50 N., R. 3 E. of N. M. P. M., bears N. 18° 53' 20" E. 9175.32 ft. Thence N. 51° 45' W. 250.7 ft. to Cor. No. 2. Thence S. 25° 06' W. 1,016 ft. to Cor. No. 3. Thence S. 51° 45' E. 250.7 ft. to Cor. No. 4. Thence N. 25° 06' E. 1,016 ft. to Cor. No. 1, the place of beginning

This being the same lode originally located on the 23d day of April, 1890, and recorded on the 23d day of July, 1890, in book 64, page 544, in the office of the recorder of Gunnison County. This further and amended certificate of location is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description, or record.

THE NOONDAY TUNNEL GOLD MINING AND
MILLING COMPANY. [SEAL.]

By EDW. J. BROWN, *Secretary*.

Said lode was discovered the 23d day of April A. D. 1890.

Attest: JOHN FRANKLIN.

Date of amended location May 7, 1906.

Date of amended certificate June 14, 1906.

[BRIEF] No. 108059.

AMENDED LOCATION CERTIFICATE

On the Matchless mining claim of the Noonday Tunnel Gold Mining and Milling Company, in Gold Brick mining district, Gunnison County, State of Colorado.

STATE OF COLORADO, }
County of Gunnison, } ss:

I hereby certify that this amended location certificate was filed for record in my office, at 2 o'clock p. m., September 13, 1906, and is duly recorded in book 179, page 66.

J. E. BROTHERS, *Recorder*.

Fees, \$.....

By F. W. HARPER, *Deputy*.

STATE OF COLORADO, }
County of Gunnison, } ss:

I, J. E. Brothers, county clerk and recorder in and for the county of Gunnison, State aforesaid, do hereby certify that the within and foregoing is a full, true, and correct copy of an amended location certificate as the same appears in the records of Gunnison County, in book 179, page 66.

Witness my hand and official seal at Gunnison, this 19th day of November, 1906.

[SEAL.] J. E. BROTHERS, *County Clerk and Recorder*.

By F. W. HARPER, *Deputy*.

ADDITIONAL AND AMENDED LOCATION CERTIFICATE,
LAW OF 1889

STATE OF COLORADO, }
County of Gunnison, } ss:

KNOW ALL MEN BY THESE PRESENTS, That the Noonday Tunnel Gold Mining and Milling Company, the undersigned, has this 4th day of June, 1906, amended, located, and claimed, and by these presents does amend, locate, and claim, by right of the original discovery and this additional and amended location certificate, in compliance with the mining acts of Congress, approved May 10, 1872, and all subsequent acts, and with section 2409 of the general statutes of Colorado, and with local customs, laws, and regulations, 1,374 linear feet and horizontal measurement on the Mascot lode, vein, ledge, or deposit, along the vein thereof, with all its dips, angles, and variations, as allowed by law, together with 150 feet on each side of the middle of said vein at the surface, so far as can be determined from present developments, and all veins, lodes, ledges, or deposits, and surface ground within the lines of said claim, 610 feet running N. 25° 06' E. from mouth of discovery tunnel, and 764 feet running S. 25° 06' W. from mouth of discovery tunnel, said discovery tunnel being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim, in Gold Brick mining district, county of Gunnison, and State of Colorado, described by metes and bounds as follows, to wit:

Beginning at Corner No. 1, whence the NE. Cor., T. 50 N., R. 3 E., of N. M. P. M. bears N. 16° 49' E. 8,976 ft. Thence N. 64° 54' W. 300 ft. to Cor. No. 2. Thence S. 25° 06' W. 1,374 ft. to Cor. No. 3. Thence S. 64° 54' E. 300 ft. to Cor. No. 4. Thence N. 25° 06' E. 1,374 ft. to Cor. No. 1, the place of beginning.

This being the same lode originally located on the 23d day of April, 1890, and recorded on the 23d day of July, 1890, in book 64, page 543, in the office of the recorder of Gunnison County. This further additional and amended certificate of location is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location,

description, or record, and of taking in and acquiring all forfeited or abandoned overlapping ground, and of taking in any part of any overlapping claim which has been abandoned, and of securing all the benefits of said section 2409 of the general statutes of Colorado.

Said lode was discovered the 23d day of April, A. D. 1890.

THE NOONDAY TUNNEL GOLD MINING
[INTEREST SEAL.] AND MILLING COMPANY.

By EDW. J. BROWN, *Secretary*.

Attest: JOHN FRANKLIN.

Date of additional and amended certificate June 14, A. D. 1906.

[BRIEF] No. 108060.

ADDITIONAL AND AMENDED LOCATION CERTIFICATE

On the Mascot mining claim of The Noonday Tunnel Gold Mining and Milling Company in Gold Brick mining district, Gunnison County, State of Colorado.

STATE OF COLORADO, }
County of Gunnison, } ss:

I hereby certify that this location certificate was filed for record in my office, at 2 o'clock p. m., September 13, A. D. 1906, and was duly recorded in book 179, page 576.

J. E. BROTHERS, *Recorder*.
By F. W. HARPER, *Deputy*.

Fees, \$———

STATE OF COLORADO, }
County of Gunnison, } ss:

I, J. E. Brothers, county clerk and recorder, in and for the county of Gunnison, State aforesaid, do hereby certify that the within and foregoing is a full, true, and correct copy of an amended and additional location certificate as the same appears in the records of Gunnison County, in book, 179, page 576.

Witness my hand and official seal at Gunnison, this 19th day of November, 1906.

[SEAL.] J. E. BROTHERS, *County Clerk and Recorder*.
By F. W. HARPER, *Deputy*.

AMENDED LOCATION CERTIFICATE, LAW OF 1889

STATE OF COLORADO, }
County of Gunnison, } ss:

KNOW ALL MEN BY THESE PRESENTS, That The Noonday Tunnel, Gold Mining and Milling Company, the undersigned, has this 7th day of May, 1906, amended, located, and claimed, and by these presents does amend, locate, and claim, by right of discovery and amended location certificate in compliance with the mining acts of Congress, approved May 10, 1872, and with all subsequent acts, and with section 2409 of the general statutes of Colorado, and with local customs, laws, and regulations, 1,377 linear feet and horizontal measurement on the Noonday lode, vein, ledge, or deposit, along the vein thereof, with all its dips, angles, and variations, as allowed by law, together with 150 feet on each side of the middle of said vein at the surface, so far as can be determined from present developments, and all veins, lodes, ledges, or deposits, and surface ground within the lines of said claim, 675 feet running N. 14° 17' W. from center of discovery shaft, and 702 feet running S. 14° 17' E. from center of discovery shaft, said discovery shaft being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim, in Gold Brick mining district, county of Gunnison, and State of Colorado, described by metes and bounds, as follows, to wit:

Beginning at Corner No. 1, whence the NE. Cor., T. 50 N., R. 3 E., of N. M. P. M. bears N. 22° 42' E. 9,163.5 ft. Thence S. 68° 18' W. 301 ft. to Cor. No. 2. Thence S. 14° 17' E. 1,377 ft. to Cor. No. 3. Thence N. 68° 18' E. 301 ft. to Cor. No. 4. Thence N. 14° 17' W. 1,377 ft. to Cor. No. 1, the place of beginning.

This being the same lode originally located on the 24th day of May, 1895, and recorded on the 1st day of August, 1895, in book 132, page 53, in the office of the recorder of Gunnison County, this further and amended certificate of location is made without waiver of any previously acquired rights, but for the

the purpose of correcting any errors in the original location, description, or record.

Said lode was discovered on the 24th day of May, A. D. 1895.

THE NOONDAY TUNNEL GOLD MINING
AND MILLING COMPANY,
[SEAL.] By EDW. J. BROWN, *Secretary*.

Attest: JOHN FRANKLIN.

Date of amended location May 7, 1906.

Date of amended certificate June 14, 1906.

[BRIEF] No. 108058.

AMENDED LOCATION CERTIFICATE

On the Noonday mining claim of The Noonday Tunnel Gold Mining and Milling Company in Gold Brick mining district, Gunnison County, State of Colorado.

STATE OF COLORADO, }
County of Gunnison, } ss:

I hereby certify that this amended location certificate was filed for record in my office at 2 o'clock p. m., September 13, 1906, and is duly recorded in book 179, page 65.

J. E. BROTHERS, *Recorder*.
By F. W. HARPER, *Deputy*.

Fees, \$———

STATE OF COLORADO, }
County of Gunnison, } ss:

I, J. E. Brothers, county clerk and recorder in and for the county of Gunnison, State aforesaid, do hereby certify that the within and foregoing is a full, true, and correct copy of an amended location certificate as the same appears in the records of Gunnison County, in book 179, page 65.

Witness my hand and official seal at Gunnison, this 19th day of November, 1906.

[SEAL.] J. E. BROTHERS, *County Clerk and Recorder*.
By F. W. HARPER, *Deputy*. *am*

AMENDED LOCATION CERTIFICATE, LAW OF 1889

STATE OF COLORADO, }
County of Gunnison, } ss:

KNOW ALL MEN BY THESE PRESENTS, That The Noonday Tunnel Gold Mining and Milling Company, the undersigned, has this 7th day of May, 1906, amended, located, and claimed, and by these presents does amend, locate, and claim, by right of discovery and amended location certificate in compliance with the mining acts of Congress, approved May 10, 1872, and with all subsequent acts, and with section 2409 of the general statutes of Colorado, and with local customs, laws, and regulations, 1,493.52 linear feet and horizontal measurement on the Bryan lode, vein, ledge, or deposit, along the vein thereof, with all its dips, angles, and variations, as allowed by law, together with 150 feet on each side of the middle of said vein at the surface, so far as can be determined from present developments, and all veins, lodes, ledges, or deposits, and surface ground within the lines of said claim, 347 feet running N. $11^{\circ} 55'$ W. from mouth of discovery cut and 1,146.52 feet running S. $11^{\circ} 55'$ E. from mouth of discovery cut, said discovery cut being situated upon said lode, vein, ledge, or deposit, and within, the lines of said claim, in Gold Brick mining district, county of Gunnison and State of Colorado, described by metes and bounds as follows, to wit:

Beginning at Corner No. 1, whence the NE. Cor., T. 50 N., R. 3 E., of N. M. P. M. bears N. $18^{\circ} 05'$ E. 10,296.6 ft. Thence S. $68^{\circ} 18'$ W. 301 ft. to Cor. No. 2. Thence S. $11^{\circ} 55'$ E. 1,493.52 ft. to Cor. No. 3. Thence N. $68^{\circ} 18'$ E. 301.00 ft. to Cor. No. 4. Thence N. $11^{\circ} 55'$ W. 1,493.52 ft. to Cor. No. 1, the place of beginning.

This being the same lode originally located on the 14th day of September, 1896, and recorded on the 17th day of September, 1896, in book 57, page 530, in the office of the recorder of Gunnison County. This further and amended certificate of location

is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description or record.

Said lode was discovered the 5th day of September, A. D. 1896.

[SEAL.]

THE NOONDAY TUNNEL GOLD MINING
AND MILLING COMPANY.

By EDW. J. BROWN, *Secretary*.

Attest: JOHN FRANKLIN.

Date of amended location, May 7, 1906.

Date of amended certificate, June 14, A. D. 1906.

[BRIEF] No. 108056.

AMENDED LOCATION CERTIFICATE

On the Bryan mining claim of The Noonday Tunnel Gold Mining and Milling Company in Gold Brick mining district, Gunnison County, State of Colorado.

STATE OF COLORADO, }
County of Gunnison, } ss:

I hereby certify that this amended location certificate was filed for record in my office at 2 o'clock p. m., September 13, A. D. 1906, and is duly recorded in book 179, page 63.

J. E. BROTHERS, *Recorder*.

By F. W. HARPER, *Deputy*.

Fees, \$.

STATE OF COLORADO, }
County of Gunnison, } ss:

I, J. E. Brothers, county clerk and recorder in and for the county of Gunnison, State aforesaid, do hereby certify that the within and foregoing is a full, true, and correct copy of an amended location certificate as the same appears in the records of Gunnison County, in book 179, page 63.

Witness my hand and official seal at Gunnison, this 19th day of November, 1906.

[SEAL.]

J. E. BROTHERS, *County Clerk and Recorder*.
By F. W. HARPER, *Deputy*.

AMENDED LOCATION CERTIFICATE, LAW OF 1889

STATE OF COLORADO, }
County of Gunnison, } ss:

KNOW ALL MEN BY THESE PRESENTS, That The Noonday Tunnel Gold Mining and Milling Company, the undersigned, has this 7th day of May, 1906, amended, located, and claimed, and by these presents does amend, locate, and claim, by right of discovery and amended location certificate in compliance with the mining acts of Congress, approved May 10, 1872, and with all subsequent acts, and with section 2409 of the general statutes of Colorado, and with local customs, laws, and regulations, 1,500 linear feet and horizontal measurement on the Little Olive lode, vein, ledge, or deposit, along the vein thereof, with all its dips, angles, and variations, as allowed by law, together with 150 feet on each side of the middle of said vein at the surface, so far as can be determined from present developments, and all veins, lodes, ledges, or deposits, and surface ground within the lines of said claim, 510 feet running N. 7° 33' E. from center of discovery shaft and 990 feet running S. 7° 33' W. from center of discovery shaft, said discovery shaft being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim, in Gold Brick mining district, county of Gunnison and State of Colorado, described by metes and bounds as follows, to wit:

Beginning at Corner No. 1, whence the NE. Cor., T. 50 N., R. 3 E. of N. M. P. M., bears N. 23° 25' 20" E. 8,860.6 ft. Thence N. 77° W. 291.72 ft. to Cor. No. 2. Thence S. 6° 28' W. 1,503 ft. to Cor. No. 3. Thence S. 77° E. 272.4 ft. to Cor. No. 4. Thence N. 7° 12' E. 1,500.92 ft. to Cor. No. 1, the place of beginning.

This being the same lode originally located on the 21st day of October, 1889, and recorded on the 7th day of November, 1889, in book 30, page 444, in the office of the recorder of Gunnison County. This further and amended certificate of location

is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description, or record.

Said lode was discovered the 24th day of October, A. D. 1889.

[SEAL.]

THE NOONDAY TUNNEL GOLD MINING
AND MILLING COMPANY.

By EDW. J. BROWN, *Secretary*.

Attest: JOHN FRANKLIN.

Date of amended location, May 7, 1906.

Date of amended certificate, June 14, 1906.

[BRIEF] No. 108057.

AMENDED LOCATION CERTIFICATE

On the Little Olive mining claim of the Noonday Tunnel Gold Mining and Milling Company in Gold Brick mining district, Gunnison County, State of Colorado.

STATE OF COLORADO, }
County of Gunnison, } ss:

I hereby certify that this amended location certificate was filed for record in my office at 2 o'clock p. m., September 13, 1906, and is duly recorded in book 179, page 64.

J. E. BROTHERS, *Recorder*.

By F. W. HARPER, *Deputy*.

STATE OF COLORADO, }
County of Gunnison, } ss:

I, J. E. Brothers, county clerk and recorder in and for the county of Gunnison, State aforesaid, do hereby certify that the within and foregoing is a full, true, and correct copy of an amended location certificate as the same appears in the records of Gunnison County, in book 179, page 64.

Witness my hand and official seal at Gunnison, this 19th day of November, 1906.

[SEAL.]

J. E. BROTHERS, *County Clerk and Recorder*.

By F. W. HARPER, *Deputy*.

LOCATION OF MILL SITE

STATE OF COLORADO, }
County of Gunnison, } ss:

KNOW ALL MEN BY THESE PRESENTS, That The Noonday Tunnel Gold Mining and Milling Company does hereby declare and publish as a legal notice to all the world that it has a valid right to the occupation, possession, and enjoyment of all and singular that tract or parcel of land, not exceeding five acres, situate, lying, and being in Gold Brick mining district, in the county of Gunnison, in the State of Colorado, bounded and described as follows, to wit:

THE BRYAN MILL SITE.

Beginning at Cor. No. 1, whence the NE. Cor., T. 50 N., R. 3 E., bears N. 20° 15' E. 11,000 ft. Thence N. 5° E. 500 ft. Thence N. 85° W. 435.6 ft. Thence S. 5° W. 500 ft. Thence S. 85° E. 435.6 ft. to Cor. No. 1, the place of beginning, containing 5 acres.

Together with all and singular the hereditaments and appurtenances thereunto belonging.

Witness its hand and seal this 7th day of May, 1906.

[SEAL.] THE NOONDAY TUNNEL GOLD MINING AND MILLING COMPANY.

By EDW. J. BROWN, *Secretary*.

STATE OF COLORADO, }
County of Gunnison, } ss:

I. J. E. Brothers, county clerk and recorder, in and for the county of Gunnison, State aforesaid, do hereby certify that the within and foregoing is a full, true, and correct copy of a location certificate as the same appears in the records of Gunnison County, in book 180, page 76.

Witness my hand and official seal at Gunnison, this 19th day of November, 1906.

[SEAL.]

J. E. BROTHERS,
County Clerk and Recorder.
By F. W. HARPER, *Deputy*.

[4—687.]

SURVEYOR-GENERAL'S CERTIFICATE OF APPROVAL OF
FIELD NOTES AND SURVEY OF MINING CLAIM

DEPARTMENT OF THE INTERIOR,
OFFICE OF U. S. SURVEYOR-GENERAL,

.....
....., 19....

I, United States surveyor-general for, do hereby certify that the foregoing and hereto attached field notes and return of the survey of the mining claim of, known as the, situate in mining district, County,, in section, township No., Range No., designated as survey No., executed by, U. S. mineral surveyor,, 19.., under my instructions dated, 19.., have been critically examined and the necessary corrections and explanations made, and the said field notes and return, and the survey they describe, are hereby approved. A true copy of the copy of the location certificates filed by the applicant for survey is included in the field notes.

.....
U. S. Surveyor-General for

[4—688.]

UNITED STATES SURVEYOR-GENERAL'S FINAL CERTIFICATE ON FIELD NOTES

DEPARTMENT OF THE INTERIOR,
OFFICE OF U. S. SURVEYOR-GENERAL,

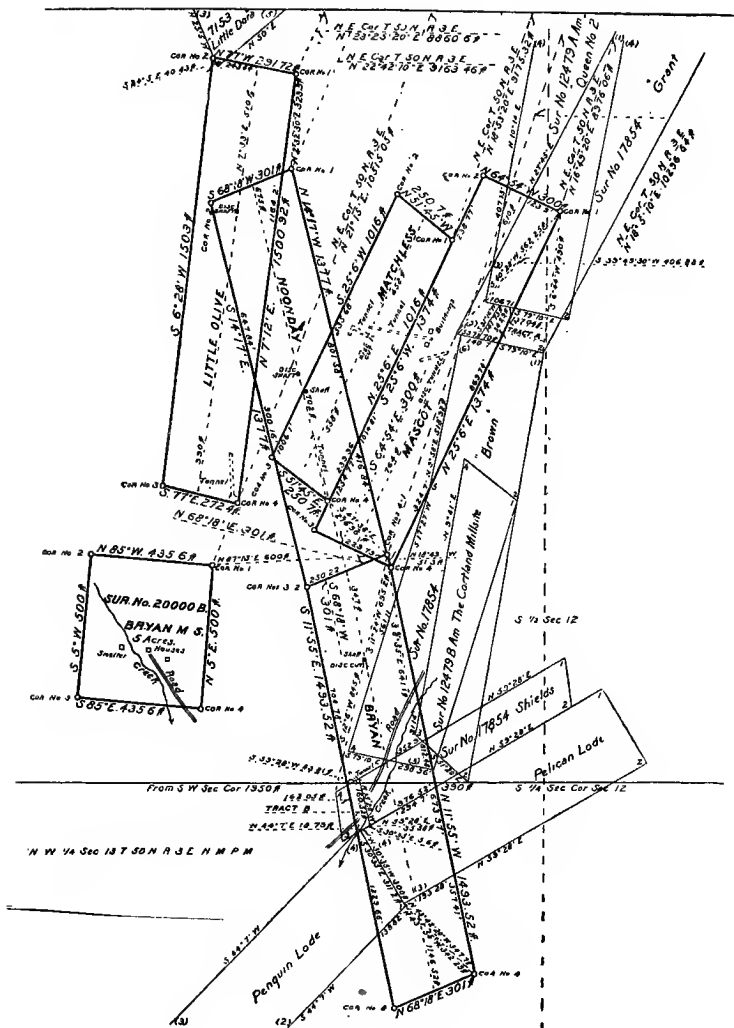
.....,
....., 19....

I, United States surveyor-general for, do hereby certify that the foregoing transcript of the field notes, return, and approval of the survey of the mining claim of, known as the, situate in mining district, County,, in section, township No., range No., and designated as survey No., has been correctly copied from the originals on file in this office; that said field notes furnish such an accurate description of said mining claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the *locus* thereof.

And I further certify that five hundred dollars' worth of labor has been expended or improvements made upon said mining claim by claimant or grantors and that said improvements consist of and that no portion of said labor or improvements has been included in the estimate of expenditure upon any other claim.

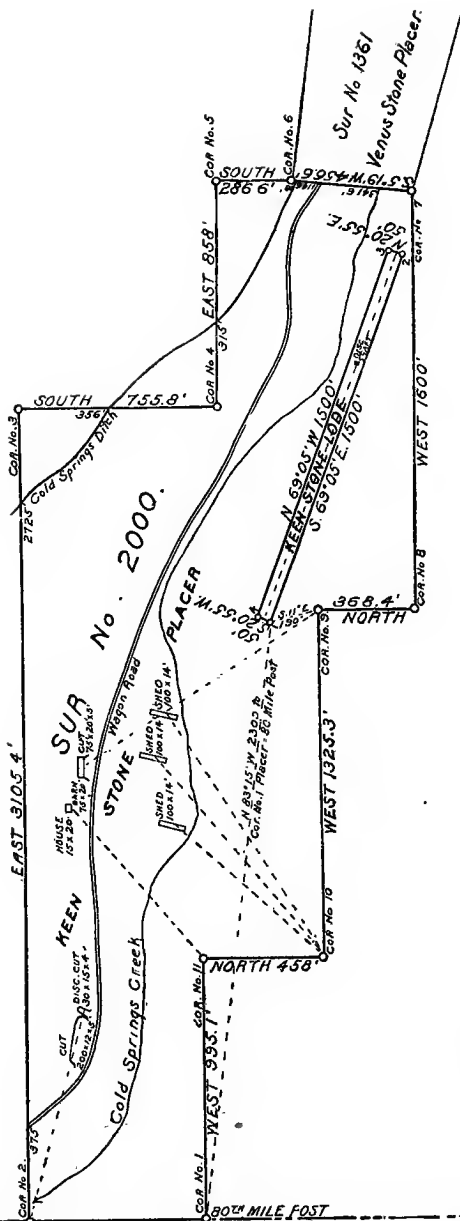
I further certify that the plat thereof, filed in the United States Land Office at is correct and in conformity with the foregoing field notes.

.....,
United States Surveyor-General for



Post No. 129 Black Hills Forest Reserve.

1647' N 0° 5' W. 670.8'



South Dakota

Wyoming

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Author

MacFarren, H

W.

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